

CA2φN
EC2
- 81C52

Commentaries on the Haley Report on Pensions

Louis Ascah, Robert Baldwin, and James E. Pesando



© Ontario Economic Council 1981

81 Wellesley Street East
Toronto, Ontario
M4Y 1H6

Printed in Canada

ISSN 0702-0643

ISBN 0-7743-6741-5

Louis Ascah is a member of the Department of Economics at the University of Sherbrooke. Robert Baldwin is National Representative, Research and Legislation, with the Canadian Labour Congress. James Pesando is a member of the Department of Economics at the University of Toronto. Michael Mendelson is a research officer with the Ontario Economic Council.

These papers reflect the views of the authors and not necessarily those of the Ontario Economic Council. The Council establishes policy questions to be investigated and commissions research projects, but it does not influence the conclusions or recommendations of authors. The decision to sponsor publication of these papers was based on their competence and relevance to public policy.

Contents

INTRODUCTION 1

by Michael Mendelson

LOUIS ASCAH 5

ROBERT BALDWIN 27

JAMES PESANDO 67



Digitized by the Internet Archive
in 2024 with funding from
University of Toronto

<https://archive.org/details/39251718130028>

Introduction

Michael Mendelson

In the final months of 1980, the Report of the Royal Commission on the Status of Pensions in Ontario (hereinafter referred to as the Report) was eagerly awaited by all those interested in pension policy. It was widely believed that the Report would represent an important step in the process of pension reform in Canada. To further an understanding and a critical appreciation of the Report by the public, the Ontario Economic Council commissioned three authors to analyse and comment on it upon its publication. When the Report was released early in 1981, each of the three authors independently wrote a paper outlining his views. Two of those papers were presented in preliminary form at an Ontario Economic Council seminar late in March 1981 (one of the authors was unable to attend the seminar). That was the first and only occasion upon which the authors compared their approaches.

The three authors represent a variety of points of view - as well as substantial experience in the pension field. Louis Ascah is a member of the Department of Economics at the University of Sherbrooke and has studied and written on pensions as an academic. He has also been an active participant on behalf of his faculty organization in pension negotiations and has served as a consultant on pension plans for various employees' organizations. Robert Baldwin is an officer with the Canadian Labour Congress and has been very active in all matters concerning pension policy for the Congress. James Pesando is a member of the Department of Economics at the University of Toronto and is one of Canada's foremost pension experts. He has written extensively on the subject; in 1977 he co-authored a study for the Ontario Economic Council with Sam Rea, jr - Public and Private Pensions in Canada: an economic analysis. Of course, all three authors are expressing their own opinions in the present volume and these may not be the views of any organization with which they are associated.

Since each author was free to choose the topics upon which he wished to concentrate, the similarities between the papers are possibly as revealing as their differences. All of the discussions begin with a critique of the proposed Provincial Universal Retirement System (PURS): the central recommendation of the Report.

PURS is a 'money-purchase plan' through which a beneficiary, upon retirement, receives simply the accumulated value, including interest, of all contributions made to his or her pension account. Money-purchase plans are sometimes also called 'defined-contribution plans.' This may be contrasted to a 'defined-benefit plan,' in which a beneficiary receives some pre-determined level of pension benefits upon retirement, and these may or may not equal past contributions. In other words, in a money-purchase plan, the contributions are set and the benefit level then follows from the contributions. But in a defined-benefit plan, the level of benefits is set and contributions can then be calculated according to what is required to pay those benefits.

In PURS, 1 to 2 per cent of each employee's pay cheque would be deducted and paid, along with an employer's contribution of 2 per cent, into a 'locked-in' account. An account is said to be 'locked-in' if it can only be used upon retirement; that is, a worker would have no access to his or her own funds before retirement. Contributions to PURS would be made on income between the basic exemption and the yearly maximum pensionable earnings of the Canada Pension Plan and would be deductible from taxable income. The employee could choose the financial institution in which to put his or her account. The accumulated amount would have to be used to buy an annuity when the pensioner was between the ages of 65 and 71. The annuity would provide a benefit of at least 60 per cent for a surviving spouse.

Baldwin and Ascah find PURS entirely unacceptable; Pesando is less definite. While all three agree that PURS will not provide a predictable level of retirement benefits for every pensioner, Pesando argues that less risky investments may minimize the uncertainty about the future real value of pensions. But Pesando remains at best lukewarm about PURS and recommends only that it is an approach that deserves further study.

Some of the differences between Pesando's approach and that of Baldwin and Ascah may be attributed to their divergent views on the issue of 'funding.' A funded pension plan is one that accumulates assets in

order to pay future liabilities. A plan is fully funded if its assets equal its liabilities. A fully funded pension plan could be cancelled at any time and pay off all its promised benefits by selling its assets. By definition, all money-purchase plans are fully funded - and that is possibly one of the reasons why Pesando generally favours the money-purchase approach. A defined-benefit plan may be funded or it may not. When a defined-benefit plan is not funded, pensions are paid out of current sources of revenues (possibly including contributions). This type of financing is generally called 'pay-as-you-go' or 'pay-go.'

Pesando argues that pay-as-you-go financing of public pension plans will result in increasing tax burdens in the future, possibly in the form of higher payroll contributions. On the other hand, Baldwin and Ascah argue that the burden of future pensions will be affected, not by funding per se, but only by the level of investment in the economy (a question that may be treated separately). But Baldwin and Ascah are writing about the general pension burden, while Pesando is concerned with the tax burden.

In very simplified form the differences between the two may be portrayed as follows:

$$\frac{\text{income of pensioners}}{\text{income of non-pensioners} + \text{income of pensioners}} = \text{general pension burden}$$

$$\frac{\text{taxes paid for pensions}}{\text{income of non-pensioners} + \text{income of pensioners}} = \text{pension tax burden}$$

If taxes paid for pensions go up but other income of pensioners goes down so that the total income of pensioners remains the same, then the pension tax burden will increase but the general pension burden will not be affected. The general pension burden will increase if total income decreases, for example if there has been insufficient investment in the economy. However, there is no evidence to show that pay-as-you-go financing will result in less than sufficient investment.

Thus the salient difference between Pesando and the others lies in their different attitudes to the sources of income for future pensioners. Pesando believes that taxes (including mandatory payroll deductions) are not the best means by which to provide incomes to pensioners in the future. Since increased reliance on taxes will result from pay-as-you-go financing, Pesando is not in favour of this kind of financing. Baldwin and

Ascah do not believe that taxation would in the future be a problematic source of income for pensioners. They argue that the financing mechanisms should not be a constraint on the design of pension systems.

The second major new program recommended by the Report is an inflation tax credit. The tax credit would operate through the income tax system and would pay an inflation-related credit to pensioners on non-indexed pension income within defined limits. None of the three authors found this recommendation at all acceptable. As Ascah shows in detail, the proposal has serious technical flaws (and the other two authors have come to the same conclusion). Pesando argues that the tax credit is needlessly expensive, and Baldwin points out that pensioners with more income will get more tax credits while those with less income will get smaller credits. The consensus is that the second main recommendation of the report is unsatisfactory.

Each of the papers considers several other issues, such as pensions in the public sector and the Canada Pension Plan, but in light of the authors' less than enthusiastic response to the principal recommendations, it is probably fair to say that the Report was found disappointing at best. As Baldwin suggests, this may be because too much was expected of it. Whatever the cause, the conclusion appears to be that the Report has failed to provide the basis for an enlarged consensus on the next steps in developing Canada's pension policy.

Louis Ascah

INTRODUCTION

There are serious deficiencies in the present retirement income system in Canada. Private sector pensions in particular have serious shortcomings: the lack of universality, poor vesting provisions, the lack of fully indexed pension benefits, and poor provisions for survivors. That is why, over the past few years, many pension studies have been undertaken and many pension reports written in Canada. The most important reports are the ones of Cofirentes + (1977) (the study group set up by the Quebec Government), the Economic Council of Canada (1979), the Special Senate Committee on Retirement Age Policies (1979), and the Task Force on Retirement Income Policy (1980).¹ The Report of the Royal Commission on the Status of Pensions in Ontario (1981) is the latest addition to this list.²

The Ontario Pension Report, which comprises ten volumes, attracts attention by its sheer size. This review will be limited to an examination of the analysis and principal recommendations for the pension system in general (Vols I to III) and for the Canada Pension Plan (Vol. V). No attempt will be made to review the recommendations regarding pensions for employees of the Ontario public sector (Vols VI and VII) or the background studies and papers (Vols VIII and IX).³

1 The last group will be referred to hereinafter as the federal Task Force. In addition to the reports cited there have been many studies by individual authors and proposals by different groups. In the United States the Advisory Council on Social Security (1979) and the President's Commission on Pension Policy (1981) have also issued reports on pensions.

2 Referred to hereinafter as the Report. References will indicate the volume number followed by the page number. The summary volume will be denoted by the letter S.

3 The other volumes in the report are a consumer's guide entitled 'Your income in retirement' (Vol. IV) and a summary report.

The review will cover three principal topics. First, it will attempt to demonstrate that the main recommendation of the Report (i.e. the Provincial Universal Retirement System) is inadequate and regressive. Secondly, it will examine the Royal Commission's most important proposals for reforming the present retirement income system with regard to vesting and inflation protection. I shall argue that these proposals are misguided or technically inaccurate or both. Thirdly, the basis for these recommendations will also be examined. The Royal Commission desired a change in philosophy towards individual responsibility for pensions, and it wanted private funding of improved pension benefits. It will be argued that in this respect the Commission has confused a savings policy with a pension policy.

MANDATORY PROVINCIAL UNIVERSAL RETIREMENT SYSTEM (PURS)

To solve the problem of the lack of universality of employer-sponsored pension plans, there is a need for large scale government intervention, either to implement mandatory employer plans or to expand public plans.⁴

Both solutions have been advanced in different reports and supported by different groups. The study group set up by the Quebec Government, Cofirentes + (1977), recommended the expansion of the Quebec Pension Plan. The Canadian Labour Congress (1978) also takes the position that the Canada/Quebec Pension Plans should be expanded. On the other hand, the Ontario Pension Report proposes mandatory private money-purchase plans. The Canadian Life and Health Insurance Association (1981) also supports the idea of minimum mandatory employer-sponsored pension plans. Finally, in true bureaucratic fashion, the federal Task Force (1980) has presented both possibilities as Option 3 ('Mandatory employer-sponsored pension plans') and Option 4 ('Larger public plans').

The Ontario Pension Report proposes to institute a 'mandatory retirement savings plan on an individual account basis for all workers in Ontario'

⁴ Some proposals for reforming the pension system are basically limited to improvements in the provisions of present employer-sponsored pension plans and will not solve the problem of the lack of universality of such plans. 'The first two options for reform' presented by the federal Task Force (1980) and the Report of the Private Sector Task Force on Retirement Income Issues (1979) do not address the question

between the ages of 18 and 65' (II, 306). This plan would be called the Provincial Universal Retirement System (or PURS).

Other elements of the PURS plan are as follows: Coverage in PURS would be identical to that of the Canada Pension Plan and would be compulsory for all workers aged 18 to 65. All contributions would be immediately vested and locked in and would be based on earnings between the yearly basic exemption (YBE) and the yearly maximum pensionable earnings (YMPE) as established for the CPP. Each employee could choose the financial intermediary to manage his or her account. Opting out of the PURS plan would be permitted for employers who offer comparable benefits on a money-purchase basis.

The amount of income replacement that the PURS plan is intended to provide is not exactly clear. For a worker at the average industrial wage, the Report notes that PURS might provide a 25-30 per cent replacement ratio (II, 310). However the Report also gives an example that produces an initial pension of 20.8 per cent for a man. The calculation is based on an employer's contributions of 2 per cent up to the YMPE at all ages and employee's contributions of 1 per cent at ages 18-30, 1.5 per cent at ages 30-45, and 2 per cent at ages 45-65 (II, 313). This replacement ratio is based on the assumption of no survivor's provisions, and the amount of the annuity is determined at retirement and not indexed. (Protection against inflation would be provided to the extent that the annuity was purchased at an interest rate embodying an inflation premium). The replacement ratio would obviously be lower if a survivor's provision were included.⁵ Finally, in a table summarizing the Royal Commission's plan for the future, the PURS system is shown to replace 15-20 per cent of gross income at the level of the average industrial wage (S, 10).⁶

of lack of universality. The Economic Council of Canada only recommends that governments 'encourage and induce the extension and improvement of private occupational pension plans' (1979, 104).

5 In fact the Report (II, 315) would require at least a 60 per cent survivor's benefit unless the spouse waived such protection in writing. Surprisingly the Report's calculations do not take this element into account.

6 By way of contrast the fourth option of the federal Task Force (1980, 242) calls for the expansion of the C/QPP by 20 to 25 per cent of earnings above the present level of 25 per cent. Covered earnings would also be extended to $1\frac{1}{2}$ times average wages and salaries. This would be in addition to the OAS pension, which would maintain its present relation to average wages and salaries.

Problems with mandatory money-purchase plans

A number of difficulties are associated with money-purchase plans. These plans suffer from long-term uncertainty and short-term volatility; they have a long phase-in period before reaching maturity; and they cannot provide fully indexed pension benefits.

At the outset it should be noted that money-purchase plans are more in the nature of savings plans than pension plans that provide payments bearing some relation to years of employment and salaries received. In fact, as noted above, the Report calls its proposal a 'mandatory retirement savings plan.'

Money-purchase plans base the pension on the amount accumulated when the retirement annuity is purchased. This places the full burden of the unknown future upon the employee and may well cause anxiety among employees attempting to plan their retirement. The long-term uncertainty of investment returns makes the results of such a plan unknown in advance. It is a simple operation to calculate real rates of return obtained in the past, and as a result some persons may also expect certain real rates of return in the future. Although these estimates can be used to project future benefits from a PURS type scheme as is done in the Report, they are only guesses; there are no guarantees.

This criticism of money purchase plans should not come as a surprise, for it simply reflects the problem of trying to base pensions on savings. The Royal Commission is aware of these problems; indeed it remarks that many more people receive GIS (Guaranteed Income Supplement) allowances than originally anticipated and 'among them are many whose private savings have been so eroded by inflation that they are "needy" within the meaning of GIS and GAINS programs' (II, 310). (GAINS stands for Guaranteed Annual Income System). It even proposes an inflation tax credit (to be discussed later) so the individual can have the assurance that saving is worthwhile (II, 245). Nevertheless the Report's main recommendation is for a savings plan.⁷

7 Other authors have also discussed these problems. For example, Munnell (1978, 6) notes for the United States: 'The Great Depression seriously undermined American confidence in the historic tradition of self-reliance and in the virtue of individual thrift as a means of providing for income in old age.' Asimakopulos (1980b, 61) writes, 'In fact, it is the inability of a large number of individuals to make

Furthermore, with a money-purchase plan the pension depends in large measure on the cyclical conditions in financial markets at the time of retirement, which means that a substantial degree of risk is present. For that reason, persons who make similar contributions and who retire only a few months or years apart can have very different pensions (Task Force 1980, 211). Those are some of the reasons why money-purchase plans are so unpopular. Defined benefit plans can be thought of, in part, as vehicles designed to pool the risks associated with these traditionally large cyclical fluctuations.

Mandatory employer plans would require a longer phase-in period than expanded public plans, and any future improvements would also require a longer phase-in period. The introduction of the Old Age Security (OAS) effectively provided for retroactive coverage, and the introduction of full Canada Pension Plan (CPP) pensions after ten years with the GIS also effectively provided for a measure of retroactive coverage.⁸ Even when the economy as a whole can afford to provide retroactive coverage, this is not the case for every individual employer, which explains the longer phase-in period under the employer scheme. If PURS were implemented today, it would require forty-seven years (sixty-five minus eighteen) to reach maturity. The problem is not just designing a pension system for persons who will participate (and acquire credits) during most of their lives. Those now retired need adequate retirement income. Mandatory private plans will not help those presently retired - public plans can.

Even with mandatory money-purchase plans, governments would have to intervene to ensure the provision of fully indexed pension benefits. The Report prescribes such intervention in the form of an Inflation Tax Credit. This need for government intervention is linked to the earlier discussion of rates of return as stated by Asimakopoulos (1980b, 61): 'In our world there is no guarantee that the investments of any one of these plans will earn the real rate of return needed to underwrite indexed pensions.'

adequate provision for consumption in old age - even when they have saved - that has led to the proliferation and growth of public pension plans.'

⁸ The Quebec Study Group Cofirentes + (1979, 68) also suggested this approach. It recommended that its improved formula for the QPP be applied, without a phase-in period, to present as well as future pensioners.

Finally, the administrative complexities, problems, and costs involved in mandatory employer pension plans are evidently larger than for an expanded public plan with simple, standardized arrangements.

On the other hand, there are advantages in expanding the CPP/QPP pension plans. Benefits in these plans bear a direct relationship to years of employment and earnings. There are no vesting problems with the CPP/QPP plans because they are fully portable and the pensions are based on earnings that have been updated to take account of changes in the average wage. Moreover, CPP/QPP benefits are automatically and fully indexed to changes in the consumer price index.

In view of the advantages of expanding the CPP/QPP plans and the serious disadvantages of PURS, the question must be asked: Why was this proposal made? The Royal Commission chose PURS because of its desire for individual initiative and private funding. This philosophy will be discussed in a separate section below.

Regressive nature of the PURS proposal

In addition to the disadvantages just discussed, the PURS proposal also has very regressive effects. The federal Task Force (1980, 272-3) presented the possible adverse consequences of an enlarged earnings-related pension system on lower-income families quite clearly:

If low-income families were required to participate in an enlarged earnings-related pension system, the amount of any contributions they made for the increased benefits would reduce the disposable income available to them during their working lives. Moreover, the enlarged earnings-related pension that they would receive after retirement would reduce their entitlement to the Guaranteed Income Supplement (GIS) and other income-tested programs. Thus, a decision to enlarge the mandatory earnings-related pension would actually adversely affect low-income families over their lifetime unless special provision were made to take account of their particular circumstances.

The Task Force presented two approaches to prevent this outcome: an exemption approach and a subsidy approach.⁹

This regressiveness of PURS is not an accident but rather the result

⁹ The Canadian Life and Health Insurance Association (1981, 5) also takes this problem into account with its proposal 'that mandatory

of a deliberate decision by the Royal Commission. The Report notes that a corollary effect of the plan will be an immediate reduction in the cost of GIS since even a modest level of PURS benefits would reduce, if not eliminate, GIS payments (II, 318).¹⁰ This is considered a positive result since PURS will allocate the cost of the benefit on an individual basis (II, 319).

Another regressive feature of the PURS scheme is the proposal to index OAS pensions only to the consumer price index and not to maintain their present relative position. Accordingly the Report projects that OAS will decline from its present level of 14 per cent of the average industrial wage to about 10 per cent after the year 2000.¹¹ Let us assume that this decline in the relative position of the OAS takes place and that PURS provides a non-indexed pension of 20 per cent as described in the Royal Commission's example.¹² Thus a couple with one earner at the level of the average industrial wage would receive 20 per cent replacement income from the PURS plan and a total of 8 per cent less from OAS (two OAS pensions) for a net increase of only 12 per cent in replacement income. Moreover this calculation does not take into account the fact that the PURS benefit is not indexed and the fact that the 20 per cent replacement ratio was based on an assumption of no survivor's benefit. The loss would be relatively greater for those with lower incomes.

pension requirements apply only in respect of that portion of an individual's income which is over one-half the AIW but not over one and one half times the AIW.' In other words there would be no contributions and no benefits on earnings up to one-half the average industrial wage.

- 10 The fact that PURS will reduce the cost of GIS is repeated at least twice more (II, 317 and 319).
- 11 In an earnings replacement plan it is important to take into account the amount of earnings replacement provided by the OAS. The federal Task Force (1980, 184) writes: 'as a first step, it is important to form a view about the appropriate level of OAS and, having decided that, then attempt to ensure that it keeps up with average wages and salaries.'
- 12 The projected relative decline of the OAS from the present 14 per cent to 10 per cent in the year 2000 corresponds to an increase in average real earnings of approximately 2 per cent a year. However, the PURS plan will not mature in the year 2000 because it requires forty-seven years to do so. Under the same 2 per cent assumption, the OAS would represent only 5.5 per cent of the AIW when PURS reaches maturity. The use of this number would only provide further confirmation of the argument presented in the text.

In large measure, then, the PURS scheme has the effect of replacing the flat-rate universal OAS pension financed out of general revenues by an uncertain, non-indexed pension financed by a regressive payroll tax.

I shall now examine some of the Royal Commission's proposals for reforming the present retirement income system.

REFORM OF THE PRESENT RETIREMENT INCOME SYSTEM

Vesting

When a worker leaves the service of an employer before the retirement date, the pension (if any) to which he or she is entitled depends on the vesting provisions. Restrictive vesting provisions have meant that many workers, especially younger ones, are covered only nominally (if at all) by pension plans because they will change employers a number of times.

As relates to the conditions for vesting, the Report (II, 77) recommends a move to a ten-year service rule for all employment pension plans if PURS is adopted and to a five-year service rule if it is not. However, the method of calculating the benefit is important.

Even when an employee is entitled to vesting, the deferred annuity provided for years of service before termination of employment is not the equivalent of what would have been provided for the same years of service had the employee remained with the same employer until the normal time for retirement. In most cases the deferred annuity is based on the individual's salary on termination of employment. If he worked with the same employer until retirement, his pension would be based on his salary at retirement. Since earnings generally increase with inflation, with increases in national productivity and with individual experience and promotions, a pension based on final salary is thus adjusted and takes these factors into account.¹³

A simple example illustrates the previous statement. Suppose a person is hired at age 30 and works for the same employer for thirty-five years. The pension plan provides for a pension calculated on final earnings at the rate of 2 per cent per year of service. Suppose further

13 Pensions based on an average of final earnings or career average earnings will also be adjusted but to a lesser extent. Flat benefit plans may also be upgraded over time.

that this employee earns \$10,000 at age 45 and \$46,600 at age 65. (This represents an annual increase of 8 per cent). The pension earned for the first fifteen years of service would be \$13,980 ($15 \times 0.02 \times \$46,600$). However if this person left at age 45, the pension would be based on his or her salary on termination of employment, and the pension earned for the first fifteen years of service would be only \$3,000 ($15 \times 0.02 \times \$10,000$).

The value of a deferred annuity based on the salary at termination of employment can be very small. Thus, some provinces now require the value of the deferred annuity to be at least equal to the value of the employee's contributions. Pesando and Rea (1977, 16) also raise this point: 'For certain types of contributory defined benefit plans, the young employee bears almost the entire cost of his pension and the benefit to him of earlier or immediate vesting may be close to zero.'

To solve this problem of vested pension benefits, the idea of upgrading deferred annuities has gained wide acceptance. The federal Task Force (1980, 193) calls for updating by average wages and salaries or updating as for active members of pension plans. The Quebec Study Group Cofirentes + (1977, 81) recommended that deferred pensions be adjusted annually by excess investment earnings above a given actuarial real rate of return. The Private Sector Task Force on Retirement Income Issues (1979, 9) also recommends that deferred pensions be updated by inflationary investment returns or, as a practical manner, a sum of money (equal to the present value of the pension entitlement) would be transferred to a locked-in RRSP for the terminating employee. The Canadian Life and Health Insurance Association's (1981, 7) proposal for mandatory employer plans recommends that a transfer of accumulated contributions be permitted at termination: 'The transfer value must not be less than twice the amount of the employee's accumulated contributions. In the case of a defined benefit plan it must also be not less than the value of the accrued benefit based on a specified realistic mortality table and an interest rate of 3 per cent.'¹⁴

Surprisingly the Royal Commission does not recommend the upgrading of deferred pension benefits but only that the employer be required to pay

14 The use of a given real interest rate of 3 per cent to calculate the present value of a deferred annuity implies that this value is not reduced by expected inflation. This amount is then invested, and it benefits from excess interest earnings.

half the cost of any vested pension (II, 79). Any excess over the employee's share of the cost will be refunded to the employee. In other words the present system, in which deferred annuities are eroded by inflation, would continue. In our example the pension would not be \$13,980 but would still be only \$3,000, but the employer would at least bear half the cost of the \$3,000.

Inflation protection and participating annuities

The effect of inflation on non-indexed pensions is obvious and need not be repeated here. It is well known that the indexing of pension payments for the economy as a whole (macroeconomic level) is feasible. With indexing, the real value of pensions remains at the level that would have prevailed had there been no inflation; i.e. a redistribution of real income away from pensioners is not permitted. In other words the cost of pension payments in real terms is the same for an indexed plan in times of inflation as it is without indexing when there is no inflation.

The problem with employer-sponsored pension plans is whether or not firms or individual pension funds (microeconomic level) can afford to pay indexed pension benefits. This feasibility is directly related to the rate of return earned by private pension funds. To the extent that some given real rate of return were available, private pension plans could afford to pay indexed pension benefits. In such a case the level of nominal pension payments would increase with inflation, but so would the nominal earnings of the pension fund.¹⁵

Different proposals have been made that would permit employer-sponsored pension plans to provide indexed pension benefits. Fully indexed pension benefits would be possible with government-issued indexed bonds, the stabilization facility proposed by the federal Task Force (1980, 231) or the inflation insurance scheme presented by Pesando (1978). In the latter schemes, credits or payments would be transferred to pension funds when inflation-adjusted rates of return fell below a given level and vice versa. Another avenue is the excess interest approach, which is described simply in the Report (II, 234): 'If the interest rate assumed in

15 For an exposition and illustration of this point see Pesando and Rea (1977, 53-8) and Pesando (1979, 85-6).

the plan is 6 per cent and the actual rate of return to the fund in the year is 9 per cent, the employer is said to have made a gain of 3 per cent from inflation. That gain should then be used to index benefits rather than to reduce employer costs.¹ The advantage of this approach is that there is only a small role necessary for governments. The disadvantage is that pension benefits may only be partially indexed, depending on the rate of return.

The excess interest approach is a proposal that has gained wide acceptance. The Quebec Study Group Cofirentes + (1977, 81) adopts this approach, and the federal Task Force (1980, 225) presents it as the minimum alternative. It is also adopted by the Private Sector Task Force on Retirement Income Issues (1979, 4) and by the Canadian Life and Health Insurance Association (1981, 7 and 9).

The Royal Commission (II, 238) proposes a participating annuity that would be made available not only to members of employment pension plans but also to participants in RRSPs. It is not clear whether the Commission is proposing a full excess interest approach or not. On one hand the Report says, 'The Commission believes that the excess interest approach could be utilized on a limited scale to provide a measure of inflation protection' (II, 238; emphasis added). On the other hand it says, 'The employer would be deprived of the inflation dividend on that part of the pension fund required for the retired lives participating annuities' (II, 239). Let us examine both possibilities.¹⁶

If the Royal Commission is proposing a full excess interest approach, one must question the need for its next proposal, for a refundable tax credit to offset the loss of purchasing power of retirement income through inflation. Why introduce an inflation tax credit if pension plans and RRSPs already provide a full excess interest approach?

If, on the other hand, the Royal Commission is not recommending a full excess interest approach, then what is it recommending? If pensioners do not receive full excess interest earnings, it follows that employers are receiving a portion of these excess earnings and are thus making a wind-

16 The Report does not say what interest rate should be used to determine the amount required to provide pensions to retired members who elect a participating annuity. The Report only notes that this interest rate should be controlled by the Pension Commission of Ontario to ensure fairness (II, 238).

fall gain.¹⁷ The Royal Commission then proposes the inflation tax credit scheme to offset the loss of purchasing power of retirement income. Governments would provide a type of inflation protection in order that employers could continue to benefit from windfall gains brought about by excess interest earnings. Compared with a full excess interest approach to the indexation of pensions, the latter combination would in effect be the equivalent of a government subsidy to employers with pension plans.

In brief, whether the participating annuity option is a full excess interest approach or not, this proposal is inappropriate in the context of the Commission's other recommendations.

The inflation tax credit

In order to encourage individuals to provide for their retirement and to save, the Royal Commission 'proposes the introduction of a refundable tax credit to offset the loss of purchasing power of retirement income through inflation' (II, 245). The maximum income eligible for the inflation tax credit would be equal to twice the total of the OAS and maximum CPP. Income eligible for protection would include income from sources traditionally considered to be retirement income but not earnings from employment. The amount eligible would be multiplied by the cumulative inflation rate in order to derive the Inflation Tax Credit. The credit would be available to persons aged 68 and over. (This age was chosen in order to reduce costs).

The Royal Commission itself notes one major criticism that can made regarding this proposal. A retiree receiving an indexed pension would also be eligible for this credit and in effect would be compensated twice

17 An employer basing his pension costs on a 5 per cent rate of interest would have to set aside \$103,797 in order to purchase an annuity of \$10,000 a year. (Based on a fifteen-year certain life expectancy at retirement). If inflation increases, the pensioner will bear the burden since the purchasing power of his pension will be (further) eroded. If interest rates increase with inflation, the employer will be able to purchase the same annuity at a lower cost. At a 12 per cent rate of interest, the employer would only have to set aside \$68,109 for a saving, or windfall gain, of \$35,688. The employer's gain corresponds (wholly or in part) to the pensioner's loss. The excess interest earnings could be used to provide indexing of the pension rather than this windfall gain to the employer, and the

for inflation. The Commission does not point out that the same argument would apply to all annuities purchased with the proceeds from money purchase plans, deferred profit-sharing plans, registered retirement savings plans, and so on, even if these annuities were not indexed. When nominal interest rates are higher, thereby embodying a substantial inflation premium, the fixed annuity that can be purchased with a given amount is higher. Therefore the higher fixed annuity already includes a measure of inflation protection. All individuals benefiting from the purchase of annuities at higher nominal interest rates would also be compensated by the inflation tax credit. The Inflation Tax Credit proposal has totally inequitable effects.

In addition, the particular proposal presented by the Commission is technically incorrect. To derive the inflation tax credit for a year, the cumulative inflation rate is applied not only to the initial net amount requiring protection but also to the previous year's tax credit (after a deduction for taxes). This involves double-counting and has the effect that the inflation tax credit can be larger than the amount required for full inflation protection. (See Table 1.) The inflation tax credit for any year is obtained by adding to the initial level of eligible income the tax credit of the previous year. This amount is reduced by the individual's marginal tax rate. The cumulative inflation rate is then applied to this amount. As can be seen in the table, after five years the inflation tax credit would be 41 per cent higher than necessary for full inflation protection. After eight years it would be more than twice as high.

THE ROYAL COMMISSION'S PHILOSOPHY

The basis for the Royal Commission's recommendations is an explicit philosophy calling for individual initiative and private funding. This led the Commission to recommend mandatory employer-sponsored money purchase plans rather than an expansion of public pension plans.¹⁸

employer's cost would remain \$103,797.

18 By way of contrast the Economic Council of Canada wanted to avoid further large-scale intervention in the pension industry. The Council did not recommend either mandatory private plans or expanded public plans but only that governments 'encourage and induce the extension and improvement of private occupational plans.' In an earlier review of the Council's report I wrote, 'One is led to conclude that overly

TABLE 1

Illustration of the operation of the inflation tax credit proposed by Royal Commission on the Status of Pensions in Ontario^a

(1)	(2)	(3) ^b	(4) ^c	(5)	(6)	(7)
					$= \$5600 \times (4)$	
		$= 0.7[(1)+(2)]$			Amount required for full inflation protection	
		Net amount eligible for inflation tax credit (\$)	Cumulative inflation tax credit (\$)	$= (3) \times (4)$	Ratio (5)/(6)	
Eligible income (\$)	Previous inflation tax credit (\$)					
8,000	0	5,600	0.10	560	1	
8,000	560	5,992	0.21	1,258	1,176	1.07
8,000	1,258	6,481	0.33	2,139	1,848	1.16
8,000	2,139	7,097	0.46	3,265	2,576	1.27
8,000	3,265	7,886	0.61	4,810	3,416	1.41
8,000	4,810	8,967	0.77	6,905	4,312	1.60
8,000	6,905	10,434	0.95	9,912	5,320	1.86
8,000	9,912	12,538	1.14	14,294	6,384	2.24

a The maximum eligible income is twice the total of the OAS and maximum CPP for the year in which the tax credit is claimed. This example applies to amounts below the ceiling. Income above the ceiling would not benefit from protection.

b Based on an assumed taxpayer's marginal rate of 30 per cent. Obviously with this type of inflation protection the taxpayer would move into higher marginal tax brackets even with indexed tax tables.

c Assumed rate of inflation is 10 per cent per year.

The Commission writes that it 'places the prime responsibility for providing retirement income on the individual' and that 'self-reliance should be encouraged and rewarded' (I, 18). It believes that the mandatory PURS plan meets 'the evident public desire for a program based on the individual account' (II, 263). The Commission endorses the individual entitlement approach to pensions (II, 284), noting that its participating annuity option leaves inflation protection to the individual (II, 239). Finally, it concludes that a change in the philosophy underlying the design of employment pensions is necessary - away from group responsibility and toward individual responsibility (II, 305).

One must confess a certain amazement at the intellectual gymnastics involved in the Royal Commission's adoption of the individual responsibility approach to pensions.¹⁹ Their logic seems to take the following course: Individual savings and the private pension system have failed to provide adequate retirement income. However, individual self-reliance remains the solution. The way to promote individual self-reliance is by legislating mandatory employer-sponsored pension plans with, in addition, the government providing inflation protection by the means of an inflation tax credit.

The second element of the Royal Commission's philosophy is the need for further increases in pensions to be funded and to have private sector funding. The Commission itself recognizes that the Canada Pension Plan has most of the advantages of the PURS scheme without the need for another cumbersome system. But a crucial difference is funding (II, 307). The Report concludes: 'Any improvements in the delivery of retirement income must come from a design which requires full and immediate funding' (*ibid.*). It is also of the opinion that the CPP does not create long-term

strong a priori biases in favour of the private sector led the Council to formulate recommendations that try to preserve the private pension system rather than to overcome its recognized deficiencies' (Aschah, 1980, 532).

19 The Report of the Special Senate Committee on Retirement Age Policies (1979) is also confusing. On one hand it concludes that 'rather than attempt to extend and revise the private pension system, the Canada/Quebec Pension Plan should become the principal vehicle for reforming the Canadian pension system' (*ibid.*, 66). It calls for an increase in the earnings ceiling of the C/QPP to 1½ times the average industrial wage (*ibid.*, 83). On the other hand it states, 'The main purpose of the study has been to improve retirement policies without increasing government expenditures' (*ibid.*, 10).

savings of the kind that a capital-intensive country such as Canada requires (II, 319). It also wants savings and funding to remain in the private sector since it is not its intention to encourage another institution with the power of Quebec's Deposit and Investment Fund (II, 315), and it is not persuaded that the mechanisms exist to ensure the use of savings in the CPP as capital investment funds (III, 168).

The Commission believes that savings provided by PURS not only solve the pension problem but also tend to reduce inflation and to facilitate job creation (II, 318). It also believes that PURS will encourage growth in the economy (III, 166-8 and S, 84).

In proposing a mandatory retirement savings plan, the Royal Commission has confused a savings policy with a pension policy.²⁰ This is not to deny that savings are important but to underline the fact that a savings policy and a pension policy are two different things. Savings should not be determined only by a pension policy, even though a determination of the right level of savings in an economy would take pension policy into account. Also, the 'savings' provided by the present generation of workers that can be used productively in order to reduce the relative burden of providing for them in the future, when they retire, is not determined or limited to contributions to public pension plans. Taxes that are used for the education and training of younger persons, taxes that are used to provide social overhead capital, and taxes used for research can all be considered, among other things, as a form of 'saving' for retirement. These and other considerations have led Asimakopoulos (1980a, 45) to write:

20 It may be useful to repeat that economists are aware that funding of public pension plans is not necessary. The crucial difference between public and private pension plans is that the government's taxing powers can assure the payment of pensions (or any other payments) irrespective of funding. Certain critics of public pension plans, by a false analogy with private plans, worry about the unfunded liabilities of public pension plans (i.e. there is a large number of future pensions that will have to be paid, and there is no fund available to pay these pensions.) Of course, future pensions will come out of future output just as today's pensions come out of today's output. There is no more reason, other things being equal, to worry about the unfunded liabilities of public pension plans than there is to worry about the unfunded liabilities of family allowances or the education system (i.e. in the future there are large amounts that will have to be spent on educating the young, and there is no fund available to pay these amounts).

The question of the appropriate size for a public pension fund in order to ensure the future payment of any specified level of pension benefits is thus one that cannot be answered by analogy with private pension plans. It involves the total government budget and is intimately related to the question of what provision should be made now to enhance the production possibilities available to future generations. This is an issue that goes beyond public pensions policy and requires, as we saw in an earlier section, judgments about the social rate of time preference for which there are no simple guidelines.²¹ (Emphasis added).

In any event a public pension plan can provide for savings if they are wanted. However, with little exaggeration one might say that the direct savings provided by public pension plans are unimportant because, with or without a public pension plan, the government can fix total saving at any level it wishes to. As noted by Lerner (1959, 517), 'The decision as to how much investment should be undertaken in the economy is determined by a host of other considerations which may completely swamp the operations of the social security fund.' Finally to allay concerns about saving, it should be understood that public plans could be partially funded and some portion of the funds allocated through capital markets if this were deemed necessary.²² The point being made is that pension policy should not be determined by confusion between savings and pensions. Both an appropriate pension policy and an appropriate savings policy can and must be determined, but they are two policies, not one.

It is also important to realize that, in a world of less than full employment, increased savings would lower aggregate demand and could well lead to less investment in productive capacity rather than more. This point is made by Donner and Lazar in their study: 'In Canada's case, a higher savings rate would reduce consumption and lead to lower growth rates and higher unemployment' (V, 177).

21 A similar point is also made in the resource study by A. Donner and F. Lazar included in the Report: 'But the necessity of making inter-temporal utility comparisons leaves a policy-maker with no sound basis for determining whether or not the present savings rate is too low. The apparent "unambiguous" claim that the savings rate is at its optimum value when the profit rate equals the natural growth rate of the economy is, upon closer inspection, ambiguous when the consumption and savings preferences of the current generation are considered' (V, 171).

22 The Commission sees problems even with the funding of public pension plans through private capital markets. 'Control of the funds created by full funding through quasi-independent government agencies is no

In fact the Royal Commission's desire for full private sector funding and delivery of any pension improvements appears to be a moral or ideological issue since the arguments presented do not lead to the conclusion that more savings are required or that public pay-as-you-go financing is inadequate. The Commission notes that the fears of bankruptcy for the CPP are meaningless (V, 87). It concludes that the intergenerational transfer in 2030 is neither as large nor as abrupt as some commentators would have had us believe and that the burden on the active workforce in the future is not unduly heavy (V, 91-2). The Commission presents the results of a resource study which concludes that the impact of pay-as-you-go public pension financing on personal saving is so ambiguous that it should be ignored (V, 93). Full funding of the CPP would, in their view, create an enormous fund and 'Canada's foreseeable capital requirements cannot accommodate investment of such large amounts' (S, 23). Finally, the Commission recommends that the CPP be funded on a pay-as-you-go basis, with a contingency fund maintained at the level required to satisfy twice the year's benefit and administrative cost pay-out three years in advance (V, 141).

CERTAIN OTHER RECOMMENDATIONS

The Royal Commission follows its philosophy of individual initiative in recommending that plan termination insurance should not be instituted by the government (II, 156). In its view, it would be wrong for taxpayers to support contracts entered into voluntarily (S, 5). The Commission argues that the extension of the employer's liability beyond the obligations to the date of wind-up by attaching the net worth of the employer is contrary to the voluntary principle of employment pension plans (II, 154). The same logic is also applied later to the question of mandatory pension indexing for employers with pension plans: 'However employers establish pension plans voluntarily and may wind them up at any time' (II, 231).

guarantee against future government intervention. However, to invest the funds either through government or private financial intermediaries still creates the problem of the exercise of power which goes with ownership of assets on such a vast scale. Concentration of control in this fashion could bring us to the pension fund socialism seen by Peter Drucker in The Unseen Revolution' (V, 101-2).

There is a change in emphasis in another proposal. The Commission recommends the use of unisex mortality tables as the basis for all annuities provided through PURS (II, 273). The use of these tables would entail a redistribution of income from men to women since women live longer on average. This redistribution is recognized by the Commission (II, 271), which explicitly agrees that insurance principles should be disregarded in this case (III, 126). This policy differs from the individual entitlement approach to pensions and the Commission's desire for a shift away from cost subsidies among members of pension plans. In justifying this different approach, the Commission argues, 'The real issue is whether government should intervene to correct what many people see as an intolerable position in terms of social justice' (III, 125) and 'this view sees retirement income as filling the basic needs of the recipient regardless of his or her sex' (II, 126).

Similarly in recommending a child-rearing dropout provision for the CPP, the Commission agrees that, under social insurance, subsidies are entirely appropriate and that women should not be unduly penalized by their necessary and socially productive absence from the workforce (V, 177-8).

One can only speculate on the changes to other recommendations that would have been brought about by the use of a 'social justice' and 'needs' philosophy rather than the Commission's usual 'individual account' approach.

To ensure the use of unisex tables, all annuities under PURS would have to be purchased from a company licensed to do business in Ontario. The Commission (in a majority decision) also recommends the use of unisex tables for annuities purchased for money-purchase plans and RRSPS. It is difficult to see how this recommendation could be implemented, for annuities could be purchased in other jurisdictions or individuals could use the registered retirement income fund approach to provide self-insurance.

CONCLUSION

In the continuing pension debate in Canada, two principal alternatives have been proposed as solutions to the serious deficiencies of the present retirement income system. The first is the introduction of mandatory employer-sponsored pension plans, and the second is the expansion of

public pension plans. The Ontario Royal Commission has chosen the first alternative and has recommended a mandatory money purchase plan called Provincial Universal Retirement System, or PURS.

PURS is unacceptable: money purchase plans suffer from long-term uncertainty and short-term volatility; PURS will take forty-seven years to reach maturity; pension benefits are not indexed; and the administrative costs and complexities would be greater than with a public plan. The PURS proposal is also regressive. It has, in large measure, the effect of replacing the flat-rate universal OAS pension financed out of general revenues by an uncertain, non-indexed pension financed by a regressive payroll tax. Low-income families would be further adversely affected by the plan since their full contributions to PURS would lead to a reduction in GIS benefits.

It has also been argued that certain other key proposals for the reform of the present retirement income system are misguided or technically inaccurate. The Royal Commission's vesting proposal would continue the present system, in which deferred annuities are eroded by inflation. It is not clear whether or not the proposed participating annuity option is the equivalent of a full excess-interest approach. This proposal is thus either unfair or inconsistent with the Commission's other recommendations.

The Inflation Tax Credit that is recommended is totally inequitable because it would provide protection by the taxpayers to persons already compensated for inflation by indexed pensions or by the high rates of interest used to determine annuities. In addition, the proposal is technically flawed by double-counting, which makes it possible for the tax credit to be larger than the amount required for full inflation protection.

The basis for the Royal Commission's recommendations is its desire for a change in philosophy for pensions towards greater individual responsibility and private funding of improved pension benefits. The Royal Commission performs amazing intellectual gymnastics in adopting the individual responsibility approach to pensions, and it betrays its confusion between a savings policy and a pension policy in proposing the mandatory provincial universal retirement savings plan.

In short, the main proposals of this Report must be rejected.

REFERENCES

- Advisory Council on Social Security (1979) Social Security Financing and Benefits (Washington: Dept. of Health Education and Welfare)
- Aschah, Louis (1980) 'Review of One in Three - Pensions for Canadians to 2030.' Canadian Journal of Economics 13, 529-32
- Asimakopoulos, A. (1980a) The Nature of Public Pension Plans: Intergenerational Equity, Funding, and Saving (Ottawa: Economic Council of Canada)
- (1980b) 'Public pensions and economic theory.' Journal of Post Keynesian Economics 3, 49-62
- Canadian Labour Congress (1978) 'Submission to the Royal Commission on the Status of Pensions in Ontario.' Mimeo
- Canadian Life and Health Insurance Association Inc. (1981) 'A discussion paper on a national pension system' Mimeo
- Cofirentes + (1977) (Comité d'étude sur le financement du régime de rentes du Québec et sur les régimes supplémentaires de rentes) La sécurité financière des personnes âgées au Québec (Québec: Editeur officiel)
- Economic Council of Canada (1979) One in Three - Pensions for Canadians to 2030 (Ottawa: Department of Supply and Services)
- Lerner, Abba P. (1959) 'Consumption - loan interest and money.' Journal of Political Economy 67, 512-18
- Munnell, Alicia H. (1978) 'Are private pensions doomed?' New England Economic Review, March-April, 5-20
- Pesando, James E. (1978) Private Pensions in an Inflationary Climate: Limitations and Policy Alternatives. Discussion Paper No. 114 (Ottawa: Economic Council of Canada)
- (1979) 'The indexing of private pensions: an economist's perspective on the current debate.' Canadian Public Policy 5, 80-9
- Pesando, J.E. and S.A. Rea, jr. (1977) Public and Private Pensions in Canada: an Economic Analysis (Toronto: University of Toronto Press for the Ontario Economic Council)
- President's Commission on Pension Policy (1981) Coming of Age: Toward a National Retirement Income Policy (Washington)
- Private Sector Task Force on Retirement Income Issues (1979) 'Report on desirable and feasible provisions under private sector retirement plans.' Mimeo

Royal Commission on the Status of Pensions in Ontario (1981) Report
(Toronto: Government of Ontario)

Special Senate Committee on Retirement Age Policies (1979) Retirement
Without Tears (Ottawa: Department of Supply and Services)

Task Force on Retirement Income Policy (1980) The Retirement Income
System in Canada: Problems and Alternatives for Reform (Ottawa:
Department of Supply and Services)

Robert Baldwin

INTRODUCTORY REMARKS

In any report that includes both a great deal of analysis and policy recommendations, a distinction can be drawn between the analytical merits of the report and the merits of the policy recommendations. Normally it would be appropriate to concentrate on the former in a review such as this. However, two considerations militate against this approach in the present review of the Report of the Royal Commission on the Status of Pensions in Ontario.

In the first place, this is but one of three reviews of the Report in the present volume, and the emphasis in the other two is primarily on the analytical merits of the Report. More important, the Report is - and was intended to be - a very political document. The Royal Commission was established as a result of intense political controversy surrounding a number of pension issues; it was established for the specific purpose of giving policy advice to the Government of Ontario on those issues¹; and its Report has now become part of the ongoing debate on pension policy. For those reasons it seems fitting that this review should concentrate on the intrinsic merits of the Royal Commission's recommendations.

Nevertheless, the analytical merits of the Commission's Report will not be ignored. Moreover, since this is not a dramatic presentation, nothing will be lost if some general conclusions in this regard are presented at the outset.

A number of excellent background studies were prepared for the

¹ The Commission's terms of reference and the statement of the Hon. William Davis to the legislature indicate to the reader the issues that prompted the establishment of the Royal Commission. See Report, Vol. I, pp. vi, x-xi.

Royal Commission. Some of them contained new information, and others provided new insight on issues that have been debated for some time. The generally high quality of this background research is fully reflected in many passages in the Report. Unfortunately, however, there are many other passages that suffer from a serious lack of analytical clarity: in some cases key terms are not given a precise definition; in other cases the logic that led to important conclusions and recommendations is not clear; and in some cases no research was done on important issues or the research that was done is not fully reflected in the Report.

The lack of analytical clarity in the Report makes it needlessly frustrating to read and casts doubt on the credibility of the Commission. Moreover, it is difficult to understand how the Commission produced a report with these elementary shortcomings when it had so much time and so many resources at its disposal. I will not dwell further on the Report's analytical problems at this juncture since they will be illustrated by reference to the specific recommendations. Nonetheless, they are serious enough to be mentioned at the outset.

Three subjects on which the Royal Commission has made policy recommendations will receive particular attention in this review: the proposed Provincial Universal Retirement System (PURS), the establishment of an Inflation Tax Credit, and the Ontario Public Sector Pension Plans. However, the reader should also be aware that the Report calls for an increase in the provincial Guaranteed Annual Income Supplement (GAINS) for single people over 65 (I, 156 ff.) as well as a number of regulatory changes that would affect the operation of employment-based pensions (Vols II and III). These recommendations are important, but the three subjects identified for discussion in this review are closer to the focus of the current pension debate. To some degree too, the Commission's proposals for regulatory changes have been overtaken by events. Since the establishment of the Commission there has been a significant change in public opinion in favour of more stringent regulation of employment-based plans and the Government of Saskatchewan has made significant changes in its pension benefits legislation. The Government of Quebec has also revised its regulations governing the disclosure of financial information about employment-based plans. These events have removed much of the novelty of the Commission's proposals.

THE PROVINCIAL UNIVERSAL RETIREMENT SYSTEM (PURS)

Of all the recommendations made by the Royal Commission, by far the most sweeping in its implications for the way in which retirement incomes may be provided in the future is the proposal to establish a system of mandatory money purchase plans at all places of employment in Ontario. This recommendation will receive a more lengthy discussion than the others both because of its importance and because it reveals much of the Commission's thinking on basic pension issues.

The nature of the PURS proposal

PURS is a money purchase plan that would require contributions from employees which would increase with the age of the employee; the rate of contribution by employees would be uniform regardless of an employee's age.² The uniform rate of contribution by the employer is intended to remove any incentive for employers to hire employees for whom they might be allowed to pay lower PURS contributions. The earnings base on which contributions would be required is the same as for the C/QPP. The Royal Commission has suggested a uniform rate of contribution by employers of 2 per cent of contributory earnings and by employees of 1 per cent for employees aged 18 to 30, 1.5 per cent for employees aged 30 to 45, and 2 per cent for employees aged 45 to 65.

Employees' contributions would be invested through an investment vehicle of the employee's choice, and the Government of Ontario would establish a central pension agency that would keep records of all contributions made on behalf of employees, allocate employees' contributions to the chosen investment vehicles, and invest funds directly for employees who did not want to choose a private sector investment vehicle. All contributions would be vested and locked in immediately, and the plan would be completely portable within Ontario. Portability outside Ontario would depend on other provinces establishing similar plans. Individual employers could opt out of PURS if they provided money purchase benefits with contributions equal to or greater than PURS. Finally, PURS benefits

2 Report II, 308-22. These pages give a full description of the PURS proposal. The requirement that PURS benefits be provided on the basis of unisex mortality tables is established in II, 273.

would be provided on the basis of unisex mortality tables.

Using sex-differentiated mortality tables, the Royal Commission has estimated that for workers who have pre-retirement earnings at the level of the average industrial wage, PURS would produce income replacement of 20.8 per cent for men and 17.7 per cent for women. These estimates, which will be discussed more fully below, assume a work history from age 18 to 65.

A Comparative evaluation of PURS and the C/QPP as methods of providing income replacement

In the Report one of the important effects of calling for the establishment of PURS is that it obviates the need for an increase in C/QPP benefits. (II, 304-8, 318-19). Indeed the two ways of providing increased replacement income are specifically pitted against each other. Therefore it seems useful in this review to compare PURS and the C/QPP as ways of providing increased replacement income. My conclusion is that the C/QPP is a vastly superior way of providing replacement income to all Ontario workers.

One thing that PURS shares with an increase in C/QPP benefits is the assumption that voluntary private coverage will not provide adequate benefits to all retired persons. Both proposals also entail immediate vesting and locking-in, and both are portable pensions, although PURS is only portable in Ontario unless other provinces introduce similar plans, whereas the C/QPP is portable across Canada. Beyond these common features, the dissimilarities begin to appear.

One of the important advantages of the C/QPP plan is that its benefits are fully and automatically indexed to the cost of living. PURS only shares this feature to the degree that participating annuities are offered to, and purchased by, PURS participants³ or if the Royal Commission's proposed inflation tax credit is adopted by the federal government.⁴ If neither of these conditions is satisfied, then PURS fails to include an important feature of the C/QPP plan.

A second comparative weakness of the PURS proposal is that it cannot deal with periods of non-participation in the labour force except by re-

3 Participating annuities are described below on pp. 34-35.

4 The inflation tax credit is discussed below on pp. 24-30.

ducing accumulated contributions and ultimately, retirement benefits. The C/QPP provides a measure of protection against periods of non-participation in the labour force by allowing contributors to drop periods of low or no earnings from their earnings' records. The total period dropped from the earnings' record equals 15 per cent of the contributory period, which for people born after 1948 is the period from age 18 to 65. The QPP also allows years spent at home tending children under 7 to be dropped from an earnings' record, and this provision has been proposed for the CPP as well.⁵ At the risk of belabouring the obvious, the advantage of these 'drop-out' provisions is that they permit periods of non-participation in the labour force without any loss in C/QPP benefits.

Another important limitation of the PURS proposal is that it requires forty-seven years to phase in full benefits because of its money purchase design. By contrast, the basically pay-as-you-go funding system of the C/QPP allows for a short phase-in period for increased benefits, or no phase-in period at all.

The fact that the long phase-in period required by PURS is not viewed as a serious problem by the Royal Commission raises an interesting question about the Commission's attitude toward the need for increased income replacement. One might have thought that if provision for further income replacement was an urgent matter, then the long phase-in period required by PURS would be viewed as a serious shortcoming.⁶ But the Commission's attitude toward the adequacy of current income replacement programs is difficult to decipher. The fact that the PURS proposal is made at all would suggest that income replacement, at least up to the average industrial (AIW), is not adequate. Yet on the other hand, the Report states categorically that all the pressing needs of the elderly have already been look after (II, 306), and in criticizing the proposal by the Canadian Labour Congress to double CPP benefits, it claims that the current level of CPP retirement benefits provides adequate income replacement up to the AIW (V, 127).

The discussion of the adequacy of income replacement programs in the Report is also striking because certain issues are not addressed. The fact

5 It is interesting to note that the Report endorses the child drop-out proposal for the CPP (II, 131) but does not acknowledge that it cannot be made applicable to PURS.

6 The Report does acknowledge that some people may view the long phase-in period as a problem. See II, 263 and III, 166-7.

that the OAS will likely decline as a percentage of AIW because it is only price-indexed as mentioned (II, 310), but the magnitude of its decline over the period required for PURS to mature is not clearly noted. The Report points out that between the time of writing and the year 2000, the OAS will likely decline from 14 to 10 per cent of the AIW. But by the time PURS has fully matured, it will likely have dropped to 6 per cent of AIW, assuming a 2 per cent annual growth rate in the real AIW. The Report calculates the total income replacement available from the OAS, CPP, and PURS at the AIW as follows (II, 310):

OAS	10-14 per cent of AIW
CPP	25 per cent of AIW
PURS	<u>25-30</u> per cent of AIW
TOTAL	60-69 per cent of AIW

The Report notes that if a spouse's OAS is added to this, then the total replacement ratio would be approximately 75 per cent of the AIW, which would be virtually full income replacement.⁷ But the income replacement projected for OAS and PURS are taken from different periods. The OAS figure is taken from the period before PURS matures, and the PURS figure is based on a mature PURS program. In addition, it is doubtful whether a spouse's OAS is relevant to this calculation, given the increasing labour force participation of women and the consequent need for women to replace their own pre-retirement earnings.

A further problem that is not discussed is whether the AIW constitutes the most appropriate upper income limit for PURS contributions and C/QPP contributions and benefits. Certainly a strong case has been made that income replacement is a far lesser problem for income-earners who earn less than the AIW than for those who earn more and that therefore increased replacement needs to be focused on people earning above the AIW.⁸ Finally it is striking that a thorough attempt was not made to

7 Elsewhere the Report criticizes the CLC for using gross replacement ratios to approximate net replacement ratios (V, 125).

8 In discussing the CLC's proposal to double CPP benefits, this point is made by Michael Wolfson (1981). In this regard it is also worth noting that the proposal for increased CPP benefits (option IV) contained in the Report of the federal Task Force on Retirement Income Policy would have provided 40-45 per cent of adjusted contributory

assess the impact on future replacement ratios of the maturing public and private pension plans that are now in existence.⁹

Returning once again to the specific features of the PURS proposal, it is important to note that since it is a money purchase plan it places all the economic risks of providing pension benefits squarely on the shoulders of the individual. It also gives rise to a situation in which contributions made during the early part of the age-18-to-64 period will be worth far more than contributions made during the latter part of the period. Neither of these conditions arises under the C/QPP. The fact that the Royal Commission does not treat these features of PURS as problems stems from its refusal throughout the first three volumes of the Report to distinguish between savings plans and pension income plans.

The most serious shortcomings of the PURS proposal also stem from its money purchase design:

- 1 benefits to workers with identical earnings and PURS contributions may be very unequal depending on the returns on their individual investments;
- 2 actual benefits received under PURS will be contingent upon the annuity rates that prevail at the date of retirement; and
- 3 the replacement ratios resulting from PURS will depend on the relative movement of the returns on investment and wages throughout the period of employment.

Of these three obvious problems in the PURS design, only the second is acknowledged as a problem in the Report, which proposes that PURS contributors be allowed to purchase annuities between ages 63 and 68 in order to deal with the problem.¹⁰ The second of the three problems is

earnings up to 1.5 AIW. (See Task Force 1979) Vol. I, 242-51). The proposal by the Canadian Life and Health Insurance Association for mandatory private pension coverage would also have insisted on mandatory coverage on incomes between 0.5 AIW and 1.5 AIW (see Canadian Life and Health Insurance Association 1981, 5-8).

⁹ Cf. The Retirement Income System in Canada, Vol. I, 123-5 and Vol. II, Appendix V, by Michael C. Wolfson.

¹⁰ See II, 314. The conditions of annuity purchase noted in the text would apply to annuities payable at 65. The Commission recommends that annuities purchased with PURS contributions be payable between ages 65 and 71.

also the only one that has a counterpart in the C/QPP. Under the C/QPP, benefits will vary with short-run movements in the yearly maximum pensionable earning (YMPE).

The fact that PURS cannot guarantee equal benefits to workers with identical histories of contributions to the plan not only distinguishes PURS from the C/QPP, but it seems especially inappropriate under a plan that is compulsory. Moreover, the differences that might plausibly result are substantial. For example, if we express the accumulated value of contributions plus interest of workers who earned 6 per cent, 7 per cent, and 8 per cent on their earnings over the age 18 to 65 period as multiples of what would be available to someone with identical contributions who earned 5 per cent, the multiples are 1.3, 1.8, and 2.5 respectively. Such large differences in the benefits received by workers with identical contributions to PURS are bound to cause serious dissatisfaction with the program.

Aside from the inequities among individual PURS contributors, PURS is also incapable of guaranteeing a specific degree of income replacement at any level of pre-retirement earnings. The reason, as noted above, is that the actual degree of income replacement that PURS will provide depends on the relative movement of returns on investment and wages through time. In estimating that PURS would replace 20.8 per cent of pre-retirement earnings at the AIW for a man and 17.7 per cent for a women, the Royal Commission assumed a gap between returns on investment and wages of 0.9 per cent over the long run.¹¹ But small variations in this gap over a long work history can give rise to significant variations in the degree of income replacement that will arise from plans like PURS.

For example, using a particular set of assumptions, Michael Mendelson has calculated that, if interest exceeds wages by 1 per cent over a 45-year work history, a plan like PURS could generate income replacement of 15 per cent. But if this interest/wage gap fell to zero, the proportion of income replaced would fall to 12 per cent; and, if it increased to 2 per cent, the proportion of income replaced would rise to 19 per cent.¹² Aside from the point of contrast with the C/QPP, which guarantees that

11 The Report's most probable economic assumptions are summarized in V, 61-63.

12 Michael Mendelson, unpublished calculation. Key assumptions in these calculations include:

- contributions as a percentage of wages - 3.5 per cent
- increase in nominal wages - 10 per cent

income replacement will be a specific percentage of the AIW, the sensitivity of replacement rates under PURS to the gap between returns on investment and wages raises several other points. First, it should recall two points made previously - namely that the objectives of the Royal Commission with regard to income replacement are ambiguous, and second, that the economic risks of providing income replacement fall on the individual under PURS. In addition, a serious and disturbing feature of the Report is that it neither acknowledges nor demonstrates the sensitivity of PURS benefits to the returns/wages gap and the possibility of inequities among individuals.

From the foregoing it should be evident why I view PURS as inferior to increased C/QPP benefits as a way of providing increased replacement income to the elderly. PURS lacks the national portability and full indexing of the C/QPP, it requires a long phase-in period, it is inequitable among individuals, and it cannot guarantee specific replacement rates. It will also be administratively unwieldy, especially for the sponsors of occupational pension plans, who will have the problem of integrating their plans with both the current level of C/QPP benefits and with PURS. Employers sponsoring plans with members in Ontario and other provinces will find this a particularly difficult problem. Moreover, in the short run, employers will face higher costs under PURS than under an expanded C/QPP.

The Commission's rationale for proposing PURS and rejecting an increase in C/QPP benefits

The Commission does not really challenge the superiority of the C/QPP as a way of providing increased replacement income. It refers to a number of virtues of PURS and a number of reasons for not increasing C/QPP benefits, but these points deal with matters other than the ability of the two schemes to generate replacement income.

-
- interest on investment fund - varies in relation to wage assumption for purposes of calculation
 - real interest on annuity - 2 per cent
 - life expectancy of annuitant - 15 years.

If the interest/wage gap had been varied by another percentage point in each direction, the range in replacement rates would grow to 10 to 24 per cent. Mendelson's calculations are also relevant to the different benefit levels that workers with identical earnings histories may face depending on their individual investment experience.

In calling for the creation of PURS, the Report describes several advantages of the program vis-à-vis voluntary employment-based plans. These advantages are shared by the C/QPP and include the following (II, 306-7): PURS provides universal coverage; it overcomes the problems of broken coverage through time; it presents predictable costs to employers; and it provides inflation protection before retirement because rates of return on investment are sensitive to inflation, and after retirement thanks to a combination of participating annuities and the inflation tax credit. However, two of these advantages of PURS are even greater under C/QPP. As noted above, the protection provided by PURS in cases of breaks in service is not equal to that of the C/QPP if a break in service involves a temporary departure from paid employment. Also the inflation protection of the C/QPP after retirement is full and automatic, whereas it is not under PURS, and inflation protection before retirement is superior under the C/QPP since it is likely that the YMPE will be more sensitive to inflation than returns on investment will be.¹³

The Report mentions a number of other advantages of PURS, mainly as points of contrast with the C/QPP. Three stand out in particular (II, 306-7). First of all, the Commission places a great deal of emphasis on the fact that PURS enables individuals to take responsibility for providing for their own retirement. Secondly, PURS is commended for making the relationship between costs and benefits direct and visible and, in a related vein, for providing full funding on an immediate and continuing basis. Finally, PURS is praised for not involving a subsidy from the less fortunate members of society to the more fortunate. While these advantages of PURS are understandable within the context of the Commission's analysis, each of them is open to debate.

The defence of PURS on the grounds that it enables the individual to take responsibility for his or her own retirement income is in obvious conflict with the mandatory nature of the plan. Not surprisingly then, the Report stresses the choice of investment vehicles as the sphere within which individual responsibility will be manifested. Thus the Commission notes that PURS allows 'an individual an opportunity to participate in the investment of his or her own account' (II, 307). But beyond choosing

13 Pre-retirement inflation protection under the C/QPP is provided by the fact that earnings' records are adjusted to reflect the growth in the YMPE between the date when contributions are made and the time of eligibility for benefits.

among a variety of private investment agencies and the proposed central pension agency, it is difficult to see what is involved in this 'participation.' Indeed if one looks at the returns to the individual members of PURS, it must be acknowledged that even if they were permitted to have self-managed accounts, the returns to them would depend on macro-economic forces that lie well beyond the control and responsibility of the individual. In short, the notion that PURS is a manifestation of individuals taking responsibility for their own retirement income cannot be accepted at face value and would not be worth discussing if it did not play such a prominent role in the Commission's defence of PURS.

The proposition that PURS makes the relationship between costs and benefits directly visible and that it is fully funded on an immediate and continuing basis is also open to debate. On the one hand it is easy to understand the Commission's point: under a money purchase plan, pension benefits are visibly and directly linked to accumulated contributions plus interest and there are no unfunded liabilities. On the other hand, one could argue that the direct and visible relationship between costs and benefits has only been achieved by placing all of the economic risks on the individual and by making the benefits unclear until the date of retirement. Indeed one could press this point farther and say that the actual cost/benefit relationship is not even known at the time of retirement since the annuity rates prevailing at that time will be based on actuarial assumptions that may not be borne out by experience and they will also include vendor's charges. In other words, before retirement the costs are known but the benefits are not, and after retirement the reverse is true. It may be noted too that the concept of full funding is basically irrelevant to money purchase plans.

A more fundamental question underlies all of the particular points that may be raised in response to the proposition that PURS clearly and directly identifies the relationship between costs and benefits. That is whether a savings plan of the PURS variety can properly be called a pension plan at all. Certainly a strong case can be made that a pension plan must promise benefits according to a clearly established formula.¹⁴ If

14 This point is forcefully argued in Weldon (1981). The idea that pensions must promise benefits is also implied in Asimakopoulos and Weldon (1968) and in the definition of a pension plan in Lawrence E. Coward, (1977, 2).

one adopts this view, then PURS does not qualify as a pension plan and the claim that it relates pension benefits to costs is a non sequitur. Moreover if one believes that pension plans must promise benefits and, further, that the true costs of a pension plan are the actual benefits paid, then it becomes an interesting question whether the costs and benefits of a pension plan can be directly related by any funding method except a strict pay-as-you-go system. Under full advance funding methods, the true costs of a plan are never known until a plan has been wound up and the last payment made to the last beneficiary.

The Royal Commission's final defence of PURS is that it does not involve a subsidy from the less fortunate members of society to the more fortunate. Although the Report is not explicit on this point, it seems to be offered as a comment on the income classes that derive the greatest net benefits from the inter-generational transfers that arise under the C/QPP. This is a much more difficult point to dismiss than the others raised by the Royal Commission. But it is not an insurmountable problem.

Inter-generational transfers occur under the C/QPP for two reasons. Given the basically pay-as-you-go nature of the plan, inter-generational transfers arise from the fact that the phase-in period for full benefits is much shorter than the contributory period of forty-seven years. Over the long run, inter-generational transfers will also occur because of fluctuations in the ratio of beneficiaries to contributors. Within each age cohort, differential net benefits result from these transfers because benefits are positively linked to earnings up to the YMPE and contributions are roughly proportionate to income. The ratio of contributions to earnings is reduced for low-income earners to a degree thanks to the effect of the yearly basic exemption (YBE), which removes earnings up to one-tenth of the YMPE from the earnings base on which employees' contributions are calculated. Despite the effect of the YBE, it is generally true that the net benefits arising from the inter-generational transfers (present value of future benefits minus present value of contributions) will increase with earnings.¹⁵

15 Empirical measures of the net benefits accruing to different income groups may be found in Pesando and Rea (1977, 95-118). See also Rae (1981, 12-13) and Economic Council of Canada (1979a, 37-40). These studies all identify the regressive nature of net intra-cohort benefits arising from inter-generational transfers under the C/QPP. Several studies also try to determine the intra-cohort distribution of

The impact of the C/QPP on the distribution of lifetime income within age cohorts is primarily a transitional problem in the sense that it occurs in its most serious form because beneficiaries will be receiving significant inter-generational transfers for the next several decades. Moreover, during that time the intra-cohort distributional effects of the inter-generational transfers are capable of being altered by increasing the degree of funding of the plan or by changing the contribution formula or both. For example, increasing the YBE, making contributions from federal Consolidated Revenue, or providing increased tax relief to low-income C/QPP contributors would all improve the intra-cohort distribution of benefits in favour of low-income contributors. In short, if one is concerned about the subsidies from the less fortunate members of society to the more fortunate under the C/QPP, there are steps that can be taken to redress this problem.

In the Report no attempt is made to canvass the possibilities for redressing the intra-cohort distributional effects of the C/QPP. Presumably this is because the Commission rejected the possibility of increased C/QPP benefits on other grounds. But what is surprising is that aside from the one rather casual allusion to the distributional effects of the C/QPP, there is virtually no attempt to deal with the distributional consequences of the retirement income system as a whole or its separate components. The growing body of literature on this subject is not drawn on; no new research on the subject was undertaken; yet, the Report contains innumerable references to the point that increased public pension benefits should only be provided on the basis of need.¹⁶

benefits assuming a full cost contribution rate that is roughly equivalent to the intra-cohort distribution of benefits under a mature pay-as-you-go system. These studies generally find the C/QPP to be mildly progressive. See Wolfson (1981), Rea (1981), and Economic Council of Canada (1981).

It is important to note that the intra-cohort distributional consequences of C/QPP in this and the following paragraphs assume a lifetime earnings framework. But, if one assumes that the major distributional issue in the pension field is the distribution of income between the current retirees and the current work force, then the lifetime earnings framework is obviously less relevant. One might still be concerned, though, with the distributional effect of the tax base used to support current transfers and the distribution of benefits among current retirees.

16 See, for example, I, 184-8; II, 81, 164, 167; and V, 125.

In recommending the establishment of PURS as opposed to an increase in C/QPP benefits, the Commission was guided by what it viewed as both the intrinsic merits of PURS and the intrinsic problems associated with an increase in C/QPP benefits. To a degree, the problems associated with the increase in C/QPP benefits are mirror images of the virtues attributed to PURS. Nonetheless, the discussion of these problems reveals some of the Commission's fundamental ideas about Canadian pension programs and is worth reviewing for that reason alone.

The Commission's chief objections to an increase in C/QPP benefits are expressed in economic and financial terms and relate to the contribution rate that will be required by the plan in future years and to a number of funding problems associated with the plan. The Commission also raises the explicitly philosophical problem that an increased C/QPP benefit does not offer sufficient scope for individuals to take responsibility for their own retirement income. But given the limited scope that PURS offers in this regard, one wonders why the Commission continues to belabour the point.

As far as the contribution rate to the C/QPP is concerned, the Report argues that future generations will not tolerate the contribution rate necessary to finance increased C/QPP benefits (II, 225, 318; V, 141). This potential problem is seen as part of the broader problem of inter-generational transfers (i.e., the Commission surmises that future generations of contributors will rebel against the cost of providing increased benefits to the current generation of contributors).

It is not entirely clear that any conjecture as to the acceptability of pay-as-you-go costs should be seen as part of the problem of inter-generational transfers. After all, once a ratio of benefits to contributory earnings is broadly determined and given a relatively stable ratio of beneficiaries to contributors, the net beneficiaries are the first generation of benefit recipients and the only net losers are a hypothetical generation of future contributors who do not receive full benefits. The Commission might conceivably have worried about the impact on contributions of the projected increase in the ratio of beneficiaries to contributors that will be caused by the post-war 'baby boom' reaching retirement age. But one of the more interesting pieces of empirical work done for the Commission isolates the impact of this phenomenon on contribution rates and reveals that it is minimal (V, 90-1).

Whether or not the cost of increased C/QPP benefits should be expressed in terms of inter-generational transfers, it is important to note that the position taken by the Commission involves predicting whether future generations will think that C/QPP costs are worth the benefits. Granted the Commission has made estimates of the future costs of the CPP under varying assumptions and these estimates are slightly higher than those made by the Department of Insurance (Report, V, 79-82). But to take the further step of judging how future generations will react to these costs is a bold step indeed, and one that is difficult to accept at face value. The only evidence in the Report that is even remotely related to making such a judgement is data from the Commission's 'Consumer Survey.' But it is difficult to imagine that the respondents understood the full implications of all the questions, and the evidence the survey provides on the acceptability of increased CPP costs is ambiguous. The Commission cites data from the survey responses that show a preference for self-generation over inter-generational funding for the CPP as part of its rationale for not increasing CPP benefits (II, 318). Having decided that an increase in CPP contributions would cause problems of inter-generational transfers, the Commission might conceivably believe that the data just referred to are indicative of a resistance to increased pay-as-you-go contributions. But the consumer survey also reveals a desire for increased public pension benefits - including CPP benefits - and a willingness among those calling for self-generation funding (the only respondents asked) to pay more to the CPP (VIII, 38-9, 42). In short, it is difficult to understand how the Commission concluded that future generations would be unwilling to pay increased pay-as-you-go costs. If that statement is no more than a projection of the Commissioners' opinions, it would have been more satisfying to the reader if they had stated that explicitly. It is striking too that the Commission did not mention that these intolerable contribution rates are already being accepted in other countries.¹⁷

17 Some major western countries with combined employer and employee contribution rates for old age pensions of more than 15 per cent in 1979 are Austria (19.5), Finland (approx. 18), Germany (18), Italy (approx. 23.5), Luxembourg (16), Netherlands (20.75), Norway (21.5), Portugal (26.5), Sweden (20.5), and the United Kingdom (20). Other

It should be evident from the foregoing that the basically pay-as-you-go funding of the C/QPP is viewed as a problem by the Royal Commission in so far as it gives rise to inter-generational transfers. But this is far from the only problem it sees in the current funding method. Two others are that the pay-as-you-go method may reduce personal savings and, as a result, capital investment and economic growth.¹⁸ On the other hand, the degree of funding that does exist under the CPP is viewed as a problem because it is lent to the provinces at less than market rates of interest. The Commission fears that this may result in provincial borrowing and spending that is larger than would otherwise be the case, as well as provincial borrowing to finance current rather than capital expenditures.¹⁹ The Report's handling of these issues is far from satisfactory, chiefly because it fails to stick consistently to one position.

In the case of the impact of pay-as-you-go financing on savings, investment, and economic growth, the Commission had background research undertaken by Fred Lazar and Arthur Donner (V, 160-95), which argued that the existence of pay-as-you-go pension schemes could not be shown to have reduced personal savings and that even if it did, it is neither theoretically nor empirically demonstrable that a decrease in investment and growth will follow. Ostensibly the Royal Commission accepted these conclusions, and it quoted at length from Donner and Lazar to refute the claim by the Ontario Department of the Treasury that savings, investment, and economic growth were all suffering as a result of pay-as-you-go social security pensions.²⁰ Nevertheless, the Report contains many passages

non-Soviet bloc countries in this situation include Argentina (26), Brazil (16), Chile (23.2), Egypt (25), India (approx. 18), Iran (27), Iraq (17), Kuwait (15), Nicaragua (15), Panama (15.5), Paraguay (26.5) Singapore (approx. 20.5), Sri Lanka (15), Syria (21), Turkey (15), and Uruguay (15-32). (U.S. Department of Health Education and Welfare 1979).

The numbers in parentheses are the combined employer and employee contribution rates. The numbers should be treated with caution since there is a high degree of non-comparability in benefits provided and the income base on which contributions are imposed. Nonetheless they do serve to make the point that payroll contribution rates well in excess of those projected for the current CPP benefits are common.

18 See III, 140-54, 167-8, 185; II, 318; VI, 115-16.

19 See III, 167-8; V, 97, 103-5.

20 See II, 92-5. The scepticism expressed by Donner and Lazar concerning the impact of pay-as-you-go financing on savings, investment, and

that are premised on the assumption that pay-as-you-go financing is reducing savings, investment, and growth (see note 18). Indeed, the impression left by the Report contradicts the conclusions arrived at by Donner and Lazar, and PURS itself is commended for providing needed productive capital (II, 318).

The discussion of loans from the CPP Investment Fund to the provinces suffers from the same type of problem, but in this case the Commission apparently did not have the benefit of background research. There is a passage in which the Commission categorically denies that there is any demonstrable link between provincial borrowing from the CPP Investment Fund (CPPIF) and either the volume or composition of provincial borrowing and spending (V, 97). But the paragraph immediately following says that any increase in the CPP Investment Fund would increase provincial borrowing and spending and further, that only if governments pay market rates of interest can there be any reasonable restraint on borrowing!²¹ Despite the fact that the Commission does not resolve the analytical question of the impact of CPPIF borrowing on provincial finances, they imply that it increases borrowing and current expenditures. Therefore the Commission calls for a revision to the rules governing CPPIF loans so that they could only be made for bonds of provincial crown corporations that would bear market rates of interest and would be certified to be for investment purposes only (V, 103-5). The presumption that provincial borrowing at less than market rates of interest increases government borrowing and spending also enters the discussion of the financing of public employees' pension plans (VI, 115-18).

Because of the Commission's concern about the current funding arrangements under the CPP, it considered the possibility of a fully funded CPP whose assets would be invested through private capital markets. This idea was rejected, however. It would have required a higher contribution rate than the current funding method, and the assets that would have to be invested would exceed the available supply of marketable securities (V, 76-7, 96).

economic growth is also expressed in Task Force on Retirement Income Policy, Vol. I, 146-52 and Economic Council of Canada (1979, 43-52).
21 See V, 97. Following the publication of the Report, an empirical analysis of the impact of CPPIF borrowing found that provincial borrowing and spending in the Atlantic provinces was increased by CPPIF borrowing, but that borrowing and spending by other provinces

The Commission's concerns about the funding problems of the C/QPP are obviously not contingent upon the operation of a particular funding method. Strict pay-as-you-go funding, partial funding, and full funding all pose problems. It is not difficult to sympathize with the concerns expressed by the Commission relating to full funding. But the problems it has raised about the impact of pay-as-you-go funding on savings, investment, and growth, and the impact of full or partial funding on provincial finances are very badly handled in the Report. In the former case the research that was done was not fully reflected throughout the Report, and in the latter case the critical research appears to have been left undone.

As was noted above, the Commission arrived at its recommendation in favour of PURS on the basis of both the apparent merits of PURS and the disadvantages of expanding C/QPP benefits. If PURS is intrinsically weak, the case made for it by the Commission may be even weaker. The virtues attributed to PURS and the problems associated with an increase in C/QPP benefits turn out, on examination, not to be what they are made out to be. Neither are the products of careful reasoning. The pity is that some of the issues passed over along the way deserved closer reasoning than they got in the main body of the Report. This is most obviously true of the issues raised in connection with the alleged funding problems of the C/QPP.

THE INFLATION TAX CREDIT

The Royal Commission's proposal for an inflation tax credit is, not surprisingly, part of a larger discussion of inflation protection in general. Therefore, while this section of the review will concentrate on the inflation tax credit, it will also discuss some of the Commission's other ideas about inflation protection.

The Commission's decision to recommend an inflation tax credit was one of its most contentious conclusions. It is one of only two places where the Report records a minority view among the Commissioners.²²

could not be shown to be influenced by CPPIF borrowing (Patterson 1981).

22 See II, 245. The other issue that gave rise to the recording of divided views among the Commissioners was the recommendation that unisex mortality tables be used to calculate benefits from money purchase plans and RRSPs (III, 126).

The minority views notwithstanding, the recommendation of an inflation tax credit is the product of a variety of considerations, of which the first and most obvious is the capacity of inflation to undermine the real value of unindexed pension benefits. At a less obvious level the Commission also rejected inflation assistance by governments that would only help the sponsors and members of employment-based pension plans. It was important to the Commission that government assistance for inflation protection should be universal (II, 233-44). Partly for that reason, proposals such as indexed bonds and a government inflation insurance fund were rejected (II, 231-3). At the same time the Commission considered the possibility that increased public pension benefits that were fully indexed might provide further inflation protection on a universal basis. But this option was rejected on the grounds of cost even though the Commission recognized the virtue of increased public benefits as a way of providing inflation protection (II, 228). Thus, the Royal Commission chose the tax system as the method of delivering universal inflation protection.

The Commission cautions readers of the Report that it has not worked out the details but only the principles of an inflation tax credit.²³ The tax credit would apply to income from sources not already fully indexed; OAS, GIS, and CPP are specifically excluded. The income that would be eligible for protection is 'income from sources traditionally considered to be retirement income including pensions, and Workmen's Compensation, but not earnings from employment.' The amount of income that would receive protection would be the lesser of (i) total eligible income and (ii) twice the maximum OAS and CPP benefits payable during a given year, minus the amount of federal and Ontario income tax payable on the maximum eligible income. The reason for deducting the tax payable from eligible income is that only disposable income is to receive protection.

The inflation tax credit would first become payable during the year when a person reached his or her sixty-eighth birthday and would only be payable if a person's employment income was less than the basic personal exemption. The amount of the tax credit during the first year of eligibility would be the percentage increase in prices during the year multiplied by the amount of eligible income minus taxes payable. The tax

23 The principles to be included in the tax credit scheme are described in Report, II, 245-50.

credit so determined would be refunded to the taxpayer. Schematically the amount of the tax credit would be determined as follows:

- 1 calculate the amount of eligible income;
- 2 subtract income taxes owing on this amount;
- 3 multiply the product of step (2) by the percentage in prices during the year; and
- 4 refund to the taxpayer the amount determined in step (3).

During the years following the first year of eligibility, two changes are made to this formula. First, the previous year's tax credit is included in eligible income. Second, the price increase referred to in step (3) becomes cumulative for all years of eligibility for the tax credit. Thus, if prices rose by 9 per cent during each of the first two years of eligibility for the tax credit, then the tax credit during the second year of eligibility would be calculated by multiplying the amount of eligible income by 18 per cent, not 9 per cent. In other words, the degree of protection would be cumulative through the total period of eligibility.

The Commission anticipates some of the criticisms that might be made of the inflation tax credit (II, 249-50). It notes, for example, that even persons with very high incomes would be eligible for the inflation tax credit, and it suggests the possibility of declaring ineligible for the tax credit anyone whose total income is some multiple of the total amount of protected income. Suggested multiples are two or three. The Commission also points out that interest and dividend income are not included in its examples of tax credit calculations and that the treatment of these sources of income under the tax credit proposal must be reconciled with the \$1000 tax exemption for income from these sources. It suggests two ways of dealing with this problem. One would be to index the deduction limit for people over 68; the other would be to allow interest and dividend income to be eligible for the tax credit on condition that the tax deduction not be claimed. The Commission also recognizes that, where employment-based plans already provide indexing, the recipients of indexed benefits will receive double inflation protection. In response to this problem the Commission observes that, 'In view of the limited band of income we proposed should be protected, we cannot recommend the abolition of all indexing adjustments in order to avoid the double indexing problem' (II, 250). A

final point worth noting is the Commission's reasoning about why the tax credit is only available once a retiree reaches age 68. The Report says, 'Eligibility should not start before retirement ... It should not start before age 65, since otherwise it might provide an undesirable incentive for early retirement.'²⁴ The reader is left to ponder how these comments on eligibility at 65 relate to the decision to have eligibility begin at 68.

The criticisms anticipated by the Royal Commission touch on some of the most serious problems in its proposed inflation tax credit. The double indexing problem, the treatment of dividend and interest income, and the age of eligibility for the tax credit stand out as problems that have not been adequately resolved in the Report itself. However, these are relatively minor issues, and the only one that merits further comment here is the treatment of dividend and interest income. In this regard the first thing to note is that investment income will receive double inflation protection to the degree that it responds to inflation. In addition, experiences such as the expansion of the \$1000 interest exemption to cover dividends and capital gains should give cause for concern about how difficult it will be to confine the inflation tax credit to particular forms of retirement income. The demands of equity will continually give rise to a call for broader income coverage under the tax credit proposal.²⁵

The most serious problem with the tax credit proposal which is alluded to but not fully dealt with in the Report is its distributional consequences. The basic design of the tax credit ensures that it will provide larger absolute-dollar benefits up to the maximum covered income. But a far more serious problem is that eligible income (basically income from non-government sources) does not represent the same share of the total income of all income classes among the retirees. Eligible income tends to grow as a share of the total income of retirees at higher levels of income, so that the distributional effect of the basic design of the tax credit is magnified.

24 See II, 249. Before describing the principles to be included in the tax credit, the Report says that some people believe a retiree can bear the effects of inflation for the first three years of retirement. The Report then notes some contrary views. This is the closest thing there is to a justification for people not being eligible for the tax credit before age 68 (II, 244).

25 In this regard it is worth noting that the finance minister in his last budget speech lamented the tendency of tax expenditures 'to pyramid.' (See MacEachen 1980).

TABLE 1
Average income and sources of income of elderly family units, 1975^a

Income source	Less than \$2500	\$2500-\$3999	\$4000-\$5999	\$6000-\$8999	More than \$9000	All income classes
Estimated no. of recipient units (000s)						
227	458	209	146	113	1153	
% of total	20	40	18	13	10	110
Average income for units in class ^b	\$1759	\$2998	\$5026	\$7254	\$14,643	\$4810
Sources of income and percentage distribution by income class						
Total earnings ^c	-	1	5	10	25	11
Investment income	5	8	18	24	37	21
Employer-sponsored pensions, annuities, etc. ^d	2	5	11	19	17	12
OAS/GIS	87	78	57	37	16	48
C/QPP	2	3	5	5	3	4
Other gov't transfers	4	4	5	5	2	4
Total income	100	100	100	100	100	100

a Elderly family units are those individuals and couples where both spouses were age 66 or over at the time of the survey (spring 1976) and thus age 65 or over in 1975, the year to which the income data apply.

b The average income shown in the table for those with less than \$2500 income is below the (OAS/GIS) guaranteed level for 1975. The most likely explanations are as follows: some of the elderly may have been immigrants who were not entitled to OAS; others were living with relatives and did not apply for GIS; and still others did not fully report their GIS benefits. Also, investment income and income from employer-sponsored pensions and annuities are both subject to substantial under-reporting.

c 'Total earnings' include wages, salaries, and net income from self-employment.

d The total amount of retirement pension and annuity income estimated through the SCF for 1975 was \$1899 million (virtually all of which consisted of employer-sponsored pension benefits). Of this total, only \$680 million was actually paid to the elderly covered by this table. Among recipients not covered here are couples where one member was under 65, recipients of a survivor's pension or of retirement income who were under 65, and institutionalized persons - including those in Homes for the Aged.

NOTE: Figures may not add due to rounding. This table excludes income or other benefits resulting from intra-family transfers, subsidized services, and supplementary provincial transfer programs. It also excludes the imputed rent derived from the ownership of a home.

SOURCE: Task Force (1979, I, 11); data are from Statistics Canada, Census Family Public Use Sample Tape, SCF 1976 (based on 1975 date).

The degree to which eligible income grows with retirees' incomes can be seen in Table 1, which is reproduced from the report of the Lazar task force. This table, which is based on 1975 data, shows that the lowest 20 per cent of elderly income earners derive only 7 per cent of their income from potentially eligible sources (investment and pension income) and that the next lowest 40 per cent derive only 13 per cent of their income from these sources. At the other end of the income spectrum, the top 10 per cent of recipients of retirement income derive 54 per cent of their income from potentially eligible sources, and the next highest income group, which makes up 13 per cent of the elderly population, derives 43 per cent of its income from potentially eligible sources. The undesirable distributional consequences of the inflation tax credit that are implied by these data can be offset to a degree by a maximum income ceiling on persons who are eligible for any tax credit. But the regressive tendency of the proposal will still remain. It is worth noting too, that if pension income is treated as a proxy for the distribution of indexing benefits, then double inflation protection will also tend to rise with retirees' incomes.

The regressive effect of the tax credit is undesirable in itself, but it also somewhat ironic in view of the Commission's belief, which is expressed throughout the Report, that further government assistance in the pension area should only be given on the basis of need (see note 16 above). It is also somewhat ironic that, whereas the cost of other possible changes to the pension system are considered in great detail, no attempt appears to have been made to determine the cost of this proposal. The costs promise to be considerable too, owing especially to the unusual decision to compound the inflation factor through the entire period of eligibility for the tax credit. This decision means that a person with ten years of eligibility for the tax credit today would be claiming a credit that amounts to nearly 80 per cent of his or her eligible income.

The reason why the Royal Commission would make a proposal with such peculiar features is a matter of conjecture. Nevertheless it is not unreasonable to assume that, having rejected an increase in the fully indexed public pension benefits in favour of PURS, the Commission wanted to eliminate one of the disadvantages of PURS - namely that it does not provide indexed benefits. Whatever the role of this consideration may have been, the Commission does state explicitly that it views the inflation tax credit as an incentive to individuals to make provisions for retirement

income outside the framework of government programs (II, 248). Unfortunately, this is precisely what gives rise to the undesirable distributional effects noted above.

The Royal Commission's discussion of inflation protection goes beyond the proposed inflation tax credit and deals with both regulatory provisions as they relate to inflation adjustments and possible schemes that would reduce the risks to plan sponsors and annuity vendors in providing a degree of pension indexing. In the latter regard it was noted above that indexed bonds and a government inflation insurance scheme were rejected by the Commission on the grounds that government expenditures should not be used to provide inflation protection to the minority of people who are members of these plans (II, 231-3). One might quibble with the Commission as to whether the long-run issue for governments should be described as cost-bearing or risk-taking, but in either case the principle the Commission has adopted is an equitable one.

The Report's discussion of other ways of providing inflation adjustments is somewhat less satisfactory. Mandatory indexing is ruled out on two grounds. First, the additional costs of mandatory indexing might force plans to wind up, and second, inflation protection would only be provided to some employees 'while adding to the costs borne by all members of society as consumers' (II, 231). The Commission's assumption that all pension costs are passed on to consumers seems a bit exaggerated, but its other concerns have some substance. What is unsatisfactory about the way the Commission dealt with these problems is that they are problems that may arise in every field of regulatory activity. And, whereas the merits of the case and the intrinsic justice of other possible areas of regulation are given a thorough airing in the Report, this is not the case with the possibility of mandating inflation protection.

The justice of the indexing issue gets particularly short shrift in the Report. In several passages the Commission correctly points out that most sponsors of defined-benefit plans and annuity vendors are only legally obliged to provide a fixed dollar benefit. It also concludes that 'the employer has no legal or moral obligation following from the nature of a pension to ensure that pensions are protected from inflation either before or after retirement' (II, 243). While there can be no disagreement with that conclusion as it relates to the legal obligation of employers, the moral dimension of that conclusion is less clear. The Commission seems to re-

cognize in at least one passage that the inflation-induced earnings on the portion of the fund that is attributable to retirees is at present contributing to the financing of basic benefits for the active workers (II, 225). Surely this is a moral issue. It could also be argued that the relationship between the costs and benefits of the retiree's pensions is obscured under unindexed pensions since the real cost of unindexed benefits is substantially less than was foreseen when workers agreed to give up a certain amount of take-home pay to get those benefits. Given the Commission's concern that the relationship between costs and benefits be clarified, one would have expected that greater concern would be shown for the justice of not indexing retirees' pensions.²⁶

Having rejected mandatory pension indexing, the Report discusses the possibility of both the excess earnings approach to providing inflation adjustments and participating annuities. The economic principle underlying both approaches is the same: they are designed to allow retirees to share the benefits of inflation-induced earnings on pension funds. The Report gives a negative account of the excess earnings approach and notes some of the technical problems to which it gives rise (II, 236-8), but the bulk of the commentary on the excess earnings approach deals with its implications for employers' pension costs. Unfortunately, this part of the discussion assumes that inflation-induced returns will be calculated as the excess of nominal returns over the long-run real rate of return on investment and that the real rate of return will be used in all funding calculations. While this version of the excess earnings approach is both possible and desirable, it is also the most costly version of the approach and it is not the only one possible. It is unfortunate that the excess earnings approach, which is increasingly accepted by the private pension industry,²⁷ is rejected by the Commission on the basis of only one version of it.

26 The importance of clarifying the cost/benefit relationship is identified as one of the key elements in the Commission's thinking at the conclusion of its deliberations (I, vii). See also II, 305-7, and III, 168-9.

27 Some of the private sector groups that have endorsed the excess earnings approach to providing inflation adjustments are: Board of Trade of Metropolitan Toronto, Canadian Bankers' Association, Canadian Chamber of Commerce, Canadian Manufacturers' Association, Association of Canadian Pension Management, and the Canadian Life and Health Insurance Association. Only the CLHIA has recommended that the excess earnings approach be mandatory.

The Report does, however, recommend participating annuities. Under this approach many of the same technical problems would arise.²⁸ Moreover, the retiree would have to accept a lower guaranteed payment in order to participate in the excess earnings, and this arrangement would only be available where retirees' benefits could be paid in the form of annuities purchased from life insurance companies. A large percentage of the present members of defined-benefit plans would be excluded from this form of inflation protection because the purchase of annuities is not the form in which benefits are paid. The subordination of the concerns of the 94 per cent of pension plan members who are members of defined-benefit plans to those of the 5 per cent of pension plan members who belong to money purchase plans is striking, especially since inflation insurance is criticized for restricting benefits to defined-benefit plans.²⁹

The Commission also recommends one important change in the funding regulations that apply to indexing arrangements. At present the regulations under the Ontario Pension Benefits Act permit indexing to wages or prices to escape the full funding requirements that otherwise apply under the Act. However, the Commission raises the objection that providing benefits on a basis other than full advance funding does not guarantee the security of indexing payments through time. It therefore recommends that, where indexing payments are made as part of the basic pension promise, these payments should be funded on the same basis as the basic benefits (II, 156). The logic of this argument is impeccable, but it is clear that in its application it will have its greatest effect on the public employees' plans where security of benefits is of less concern. The reason for this is that inflation adjustments provided in the private sector are frequently provided on an ad hoc basis from employers' operating

28 Participating annuities are described in Report, II, 238-9.

29 See II, 233. The same bias in favour of money purchase plans arises when the Commission decided to base its proposed vesting rules on years of service rather than age. The Commission recognizes that a years-of-service definition is more relevant to increasing benefits under a money purchase plan than under a defined-benefit plan and an age definition would be most relevant to a defined-benefit plan (II, 66). It was noted above that throughout Vols I-III the Commission fails to distinguish between savings plans and pension plans. One way in which this manifests itself is in its high praise of money purchase plans. Ironically however, it treats the fact that most public employees are covered by final average earnings plans as a manifestation of the superior benefits available to this group. See VI, 141.

revenues rather than from the pension fund and they are seldom part of the basic pension promise. The applicability of its funding proposal to public employees' plans is emphasized by the fact that the Report recommends that the Public Service Superannuation Adjustment Fund be abolished and that the indexing benefits provided from that fund be made from the basic pension plans for which the PSSAF now provides indexing payments (VI, 82-3).

The possibility that this proposed change in the funding rules that pertain to public employees' plans is designed to eliminate pension indexing under those plans derives some support from the claim made elsewhere in the Report that:

The fully indexed pensions of government employees are certainly maintaining pension purchasing power, but the need for such maintenance is questionable and in terms of costs to the taxpayer and the benefit to only one group is not justifiable. We believe that pressure will and should be brought to bear to equalize the position of government and private sector employees (II, 250).

In any context the forcefulness of this statement would be striking. But it is especially striking, coming as it does at the conclusion of a chapter that is more than forty pages long and that makes only a handful of passing references to public employees' pensions. In view of the comments just quoted it is surprising that one of the references shows that a majority of respondents to the Consumer Survey support the indexing of public employees' pensions (II, 211). In other words the above quotation is not the conclusion to an argument developed in the Report; rather it appears to be little more than a statement of prejudice. The imagination has to stretch a great deal to assume that such a strong prejudice would have no bearing on the Commission's recommendation on the funding of indexed benefits for public employees.

ONTARIO PUBLIC EMPLOYEES' PLANS

Volume VI of the Report is devoted to a discussion of the pension plans of public employees in Ontario. This volume provides a great deal of information on the plans covering Ontario public employees including: a description of the plans' benefit provisions; the make-up of the plan memberships; the funded status of the plans; their costs and funding methods; and a comparison of these plans with other public employees'

plans. While some of this information is provided on a large number of the 127 Ontario public sector plans, most of the discussion deals with the six largest plans, which contain more than 84 per cent of the members of all public sector plans. Those are: the Public Service Superannuation Fund (PSSF), the Teachers' Superannuation Fund (TSF), the Ontario Municipal Employees Retirement System (OMERS), the Hospitals of Ontario Pension Plan (HOOPP), the Ontario Hydro Pension Plan, and the Workmen's Compensation Board Plan (WCB).

In the introduction to Volume VI, the Commission identifies the key questions that guided its discussions. Some of its remarks in this regard are worth quoting at length since they explain both the subject and the tone of much of the analysis in Volume VI.

The Honourable William Davis in his statement to the Legislature on the establishment of this Commission noted that the conspicuous fully-indexed benefits of federal and provincial public employee pension plans had caused some public dissatisfaction with private sector pensions. The Commission was specifically directed to study the inter-relationship between private and public sector pension plans. Other issues arise only for public sector plans such as the investment of pension funds, the existence of the funds themselves, cost-control in a non-profit climate, and the subject of collective bargaining rights.

In its assessment the Commission has directed itself in large measure to the consideration of the cost of public sector pensions ... [Several factors] have caused the Commission to concentrate on the problems of cost identification and cost control for the protection of both plan members and the taxpayers of the province (VI, v).

From the foregoing it is clear that the Commission's primary concern with costs stems from its desire to protect taxpayers and plan members and that it is further concerned about public sector plans vis-à-vis those in the private sector. Therefore this review will deal with the Commission's discussion of cost identification and control. Brief comments will also be added on the Report's discussion of public versus private sector plans and the investment policy of public sector plans.³⁰

Cost identification and cost control

In the Commission's analysis, cost identification is seen as a prerequisite for cost control. Cost identification has several meanings. It clearly

30 As the previous sections of this review have suggested, the reader should also be aware that recommendations affecting public sector pension plans are also found in Vols II and III, where a number of proposals are made for the amendment to regulations that govern all

refers to the full identification of pension costs at any particular time. In this regard the Report clearly spells out the types of costs that need to be identified (VI, 124-5), and it criticizes the Teachers' Superannuation Fund for failing to identify all the costs associated with the operation of the plan (VI, 125-7). Cost identification also refers to the proper assessment of the future costs of the pension obligations that the Government of Ontario has assumed. This meaning of the term is the basis for the Commission's concern over the funding methods and actuarial assumptions used in Ontario public service plans (VI, 69-70). Finally, cost identification refers to the need for the Ontario Government to be able to identify the cost of all Ontario public sector plans. This aspect of the concept leads the Commission to assess the overall management responsibility for Ontario public sector plans as well as the relationship between the overall financial planning framework of the provincial government and the financial reporting on each separate plan and all plans combined (VI, 125, 140 ff.).

The meaning of cost control is somewhat more elusive. In some passages it is virtually equated with long-term cost identification (VI, 147) and the absence of central control over all public sector pension costs (VI, 146). In other cases the absence of it is said to be manifested by the growth of pension costs and liabilities above an unspecified level. But neither the source of the cost increases nor whether they were anticipated seems to have been an issue (VI, 133-9). In yet another passage the absence of cost control is said to be demonstrated by the fact that public sector pension costs exceed those in the private sector (VI, 141). The variety of explicit and implicit meanings that are given to the term cost control leave the reader wondering exactly what is meant by this key term. Nonetheless, the Commission is clear in suggesting what needs to be done to accomplish cost control. According to the Commission the key steps are: all aspects of public employees' plans need to be valued according to the rules of either the projected accrued benefits or level premium versions of full advance funding (VI, 69-71); all unfunded liabilities must be amortized on the schedules that apply in the private sector (III, 69-70); the system of matching employers' and employees' contributions under the Public Service Superannuation Fund and the Teachers' Superannuation Fund should be abolished (VI, 76); actuarial valuations need to be performed annually on plans with assets in excess of \$150

employment-based plans including those in the public sector.

million³¹; central direction needs to be given in determining the assumptions used in these valuations (VI, 146-51); and the various departments and agencies that have direct responsibility for operating these plans must include the full pension costs to their employees in their annual budgets (VI, 147). The Commission says that the alternative to these cost control measures is to abolish the existing plans and substitute money purchase plans for them (VI, 154, 218).

Much could be said about the Report's specific suggestions for cost control, but the most pressing problem arising out of the whole discussion is whether the goal of cost control is attainable even if the total package of recommendations is adopted. In commending the principles of full advance funding and the level premium versions of it, the Commission appears to view cost control as a way of establishing both present and future pension costs with a high degree of precision (VI, 70-1). The larger objective of this exercise is to permit central financial planning for public sector pensions within the overall financial planning framework of the Province. But, as the Report itself notes, the cost estimates generated by these funding methods are at best educated guesses at the actual costs of a pension plan, and deviations from estimated costs are the rule rather than the exception under defined-benefit plans (VI, 122). The degree of latitude that the Commission would allow for these deviations is not spelled out, but it would be an important question in deciding whether the dictates of cost control are being met. The fact that the Commission expresses its dissatisfaction with adequate levels of overall funding that result from offsetting errors in the assumptions used for valuation purposes suggests that it would like to be very strict about the degree to which actual experience conforms with predicted experience.³²

The problems that public sector plans would have in conforming to the dictates of cost control would be compounded further if the dictates of cost control included a presumed upper limit on the acceptable levels of cost. In the short run this difficulty would be aggravated by two things.

31 VI, 95, 150; and II, 111. This is the one case where the Commission calls for a regulatory provision that would apply in the public but not the private sector, where triennial valuations are considered adequate. This distinction is acknowledged in VI, 218.

32 VI, 92-6. It should be noted that in a background study by Keith Cooper (1981) recent actuarial reports on all the major plans were assessed and found to be adequately funded.

First, the Commission has suggested that initial unfunded liabilities under the Public Service Superannuation Fund and the Teachers' Superannuation Fund, on which the Province is paying interest but not principal, must have the principal paid off (VI, 65-6 and II, 157-8). Second, the Commission's insistence that the indexing provisions under these plans be put on an advance funding basis will give rise to substantial unfunded liabilities that will have to be amortized (VI, 76-80). Given the Commission's concern that the current cost of the public sector plans may already be a sign that there is no cost control, these compounding problems are likely to push the costs over whatever threshold the Commission is using.

In trying to come to grips with the discussion of cost control in the Report, one gets the impression that the Commission would like to set impossibly difficult standards of cost control for public sector plans. To put a somewhat sharper point on this observation two things are worth noting. The Commission has expressed its concern not only about cases where deficits arise under these plans, but also about surpluses both because they may give rise to demands for increased benefits and because the taxpayers are contributing too much to them (VI, 70-1, 128). The commission also says it wants to set tougher standards of cost control in the public sector than in the private sector (VI, 223). Thus it is surprising that the Commission's call for money purchase plans was contingent on cost control not being achieved. The spirit of its remarks would suggest that money purchase plans are the only plans compatible with cost control.

In the discussion of cost control, several perspectives that were not fully developed are worth noting. One is that, in assessing the costs of public sector pension plans, the employers' projected costs can be related to either the payroll of the covered plan members or the tax base from which the employers' cost is ultimately derived. For purposes of comparing labour costs in the public and private sectors, the former point of reference for pension costs is certainly more relevant and it is the one that the Commission usually adopts. But from the point of view of the taxpayer, this point of comparison may not be nearly as relevant as a comparison of the pension costs and the tax base; however this approach receives little attention.³³ Moreover, in assessing the costs of public

33 The one exception to this rule is a comparison of projected public sector pension costs with the projected CPP earnings base (VI, 185).

sector plans, the Report identifies normal costs and special payments separately, but it compares the combined costs to the payroll base (VI, 154-88). However, a strong case could be made that special payments deriving from initial unfunded liabilities are not relevant to the long-run cost of these plans and that the most appropriate comparisons within the public sector, and between it and the private sector, would deal only with current service costs.

Finally, the possibility of satisfying the exigencies of cost control by using completely pay-as-you-go public sector pensions deserves a more thorough canvassing than it is given in the Report. Pay-as-you-go funding is dismissed rather summarily on several grounds: it does not involve the same discipline in setting aside funds on an ongoing basis; in some passages it is suggested that the security of the plan members' benefits is diminished under pay-as-you-go plans in the public sector; and in other passages the financial problems of New York City and Cleveland are invoked as manifestations of the problems that can arise from a lack of full funding.³⁴ But one could argue that because the planning horizon under pay-as-you-go plans can afford to be shorter than under fully funded plans, and because there are fewer elements involved in cost calculations, it may be possible to make more accurate cost estimates under pay-as-you-go plans. Whether the cost calculations would be incorporated into the financial planning of the provincial government may be viewed as a moot point. But if one presumes perverse intent on the government's part, there is little point in calling for financial planning under any form of funding. Given that it is at least plausible that a pay-as-you-go plan could satisfy the requirement of yielding identifiable future costs as well as a fully funded plan, the comparative costs of the two funding approaches were at least worth assessing.

The comparison of public and private sector pension plans

As was noted above, the Commission's comments on cost control enter into its comparison of pensions in the public and private sectors. Having determined to its satisfaction that public sector plans lead private sector plans in both benefits provided and the employer's cost of these plans, the

34 VI, 69-70, 121; and II, 158. See also VIII, 116.

Report argues that this demonstrates a lack of cost control in the public sector (VI, 146). The analytical element in this discussion is open to severe criticism on the grounds that the comparative cost data reported in the text are not corrected to take account of the different assumptions used in the valuations, the different service and demographic characteristics of the groups compared, the different investment policies in the two sectors that result in lower rates of return and higher employer costs in the public sector, and the inclusion of both past and current service costs in the data used for comparison. However, there is a more serious limitation of the entire discussion at a higher level of principle.

Before it actually discussed the comparative costs of pensions in the public and private sector, the Royal Commission recommended that:

The Government of Ontario seek to achieve parity with the private sector in total compensation of its employees, and in particular should not provide pension benefits more generous than those generally available in the private sector, measured by the full and true costs of such benefits. The government should not lead the way for the private sector, particularly in the areas of inflation adjustment and early retirement without actuarial reduction (VI, 142).

But it does not follow from the concept of total compensation comparability that particular elements in the compensation packages, such as pension benefits, need to be identical. Nor does it follow that within the pension area particular aspects of a pension plan, such as inflation adjustments or early retirement, need to be comparable. What is at issue in total compensation comparability is precisely that: total compensation - not its sub-elements. Moreover, even if one were to restrict one's field of vision to pensions, the concept of total compensation comparability would demand that the Commission establish a private sector benchmark for purposes of comparison. For example, the Commission would have to identify the average private sector plan, the best private sector plan, or some other benchmark. While this choice is normally made on the grounds of fairness to taxpayers and employers, it is certainly arguable that governments have a responsibility to workers to establish compensation programs that are worthy of emulation in the private sector. In this regard it is noteworthy that the Commission cannot claim that public sector plans provide more generous benefits than all private sector plans (VI, 142-6).

The Royal Commission has clearly drawn inferences from the concept of total compensation comparability that are totally unjustified. The in-

ferences appear to reflect the same type of prejudice as the comments quoted at the end of the previous section.

The investment policy of public sector pension plans

A final aspect of the Commission's discussion of public sector pensions that merits comment is its discussion of the investment policy of these plans. The Commission recommends that separate funds be established for the PSSF and the TSF, which are at present part of the general accounts of the Province and that these funds be invested in marketable securities.³⁵ These proposals are not objectionable themselves, and even ardent supporters of the public sector can take heart at the more active role of governments in capital markets and in the lower cost to governments of public employees' pensions that should result (VI, 118). However, some of the reasoning that lies behind the proposal is disturbing if only because it revives arguments that seemed to be put to rest elsewhere. It is one more case where a key issue has not been researched or where research that has been done has not been fully reflected in the Report.

In defending the recommendation that public sector plans invest in private capital markets, the Commission revives the argument that saving leads to investment and economic growth. They also invoke the distinction between the private and social rate of return on investment. But both these propositions were explicitly rejected by the Donner and Lazar study, and the Commission ostensibly gave its blessing to the argument that the saving/investment/growth chain was too simplistic (See note 19 above). The Commission also revives the argument that low-interest government borrowing from pension funds increases government borrowing and expenditures and tends to induce borrowing for current as opposed to capital expenditures. Once again, the Commission ostensibly rejected this position elsewhere in the Report but, in this case, it has not had the research done on this key issue.³⁶ The Commission even implies that the employees' benefits will be more secure if the funds are invested in marketable securities despite having said elsewhere that full funding, and hence

35 The latter of these two objectives could also be achieved by increasing the rate of return attributed to the Public Service Superannuation Fund and the Teachers' Superannuation Fund.

36 III, 167-8; V, 97, 103-5. See also note 21 above.

investment policy, is irrelevant to the security of benefits in the public sector (VI, 116).

The Report also argues that the cost of public sector pensions to the taxpayers will be reduced if the funds are invested in marketable securities (VI, 107-8). While this is true in the likely event that returns on investment increase, it fails to take account of the second-order effects on the total cost of Provincial borrowing. This is an acute issue since the non-marketable securities held by the public sector funds amounted to 45 per cent of the total Provincial debt in 1978 (VI, 102). The question that needs to be answered is to what degree this debt would have been incurred if the public sector funds had not existed and how much higher the interest would have to have been on debt issued through the capital markets. For the taxpayer the issue is the degree to which his or her gains in reduced costs of public sector pensions would have been offset by the higher costs of general borrowing. The lack of research on the impact of lower-interest borrowing from public sector pension plans is especially regrettable. Indeed the entire discussion in support of the investment of public sector funds in private capital markets leaves much to be desired.

CONCLUDING REMARKS

When any undertaking is begun in the midst of a great deal of fanfare, it inevitably give rise to great expectations for the results. Not only was the inception of the Royal Commission on the Status of Pensions in Ontario surrounded by fanfare, but its entire history was the object of much discussion. Each of the several delays in the publication of its Report brought with it a delay in pension conferences whose organizers wanted the Report as background to the conferences. Indeed the entire process of pension reform seemed to be brought to a standstill while people eagerly awaited the Royal Commission's Report. Naturally, expectations as to the quality of the Report were high and were fuelled by the publication of numerous other pension reports of extremely high quality. As a result, it would have been difficult for the Royal Commission to produce anything that would have satisfied its eagerly waiting audience, and what it did produce fell far short of the great expectations that people had for it.

In anticipating the Royal Commission's Report, people were not confining their curiosity to its quality. Battle lines had already been drawn

on the major issue of the public versus private components of pension reform. But the attack on an expansion of public pensions was part of a more general attack on the public sector, which was led by the same business interests that were championing the cause of private pensions. Elements in the broader attack included: the accusation that government spending was contributing to the slowness of economic growth; the accusation that government borrowing was squeezing private borrowers in financial markets; protestations that governments as employers were setting compensation standards that could not be matched in the private sector; and, as a sub-theme of the previous point, the claim that the fully indexed pensions of public employees set a standard of generosity in occupational pension plans that could not be met in the private sector. In the midst of this controversy the Ontario Ministry of Treasury, Economics and Intergovernmental Affairs began its own attack on the pay-as-you-go funding of the CPP. According to TEIGA, the pay-as-you-go funding of the CPP was reducing personal saving, investment, and economic growth and therefore reducing the productive capacity of the economy out of which pensions could be paid.³⁷

Given the background to the creation of the Royal Commission, one would have expected it to address the key issues in the ongoing pension debate. But the Commission also managed to touch on the other main elements in the attack on the public sector in a way that essentially accepted the accusations made against the public sector.

Whatever one may think of the Commission's PURS proposal as a way of delivering pension benefits, it may be viewed as an attempt to bridge the two sides of the public sector/private sector debate. The PURS proposal shares the mandatory feature of the public sector position as well as its underlying assumption that voluntary private pension coverage will never be adequate for all workers. Ignoring momentarily all of the differences between PURS and an expanded C/QPP noted above, PURS makes a distinctive contribution to the private sector side of the debate by channelling approximately 3.6 per cent of contributory earnings in Ontario into private financial institutions. By the late 1970s this would have meant channelling more than a billion dollars a year in new money into private

37 See, for example a speech delivered to the Association of Canadian Pension Management by Tristram Lett (1977), who at the time was the Senior Budget Advisor for Pension Policy, TEIGA.

financial institutions.³⁸ What these institutions might have lost in the intellectual argument above coverage by voluntary private pensions they gained in money to manage.

In addition to the direct contribution that PURS would make to the assets to be managed by the private sector, the Report's recommendations for the funding of the CPP and public employees' pension plans are premised on the assumption that governments enjoy too ready access to low-interest loans from the CPPIF and public sector pension funds. The proposals in both areas are intended to limit government borrowing from these sources or to limit the purposes of that borrowing, or both. By themselves these proposals could lead to a further squeeze on private borrowers except that the PURS proposal and the channelling of public sector pension funds through private capital markets are designed to increase substantially the supply of funds available in private capital markets. For the purposes of its recommendations, the Commission endorsed the view that the government's spending was being facilitated by its access to pension savings on favourable terms despite the fact that it supposedly rejected this view.³⁹ Implicit in all of this is the more fundamental view that government spending is itself problematic.⁴⁰

The same bias against the public sector pervades the Royal Commission's discussion of public employees' pensions. In spite of paying lip service to the concept of total compensation comparability, the Commission takes the view that the public sector should not offer higher pension benefits than the private sector.

At the beginning of this review it was noted that the Royal Commission's Report is - and was intended to be - a very political document. But politics exists at many different levels. At its most obvious level it is represented in partisan conflict. But it is also a way of mediating and

38 PURS contributions would initially be almost identical to CPP contributions in Ontario, which in 1978 amounted to \$1050 million. (See Health and Welfare Canada 1978, 7).

39 See pp. 22-23 above.

40 The Report's implicit attack on government expenditures is particularly interesting when contrasted with its support for a number of regulatory measures and tax expenditures. At one level this reflects the fact that the presence or absence of 'government intervention' is often less an issue than the immediate government control of financial resources. At another level it may also reflect a preference for forms of intervention whose economic consequences are 'stealthy.' On the latter point see Economic Council of Canada (1979, 43-4).

resolving more general social conflict in favour of some groups and at the expense of others. It is also philosophical in the sense that contending views of what is 'good' for the community are the grist of political life. Therefore, even if the partisan implications of the Royal Commission Report are ignored, its political significance does not disappear altogether.

Philosophically the Royal Commission makes much of its commitment to the individual's freedom and responsibility to make his or her own pension arrangements.⁴¹ But the individualism endorsed by the Royal Commission is limited to the individualism that manifests itself in the acquisition of individual property rights through the market place. It is, to use C.B. Macpherson's (1962) terminology, the quintessence of possessive individualism. It would appear too that the Commission's commitment to individualism has far more to do with protecting private market institutions than with protecting individuals, given the mandatory nature of its individualist PURS proposal. To paraphrase Rousseau, the individual will be forced to be free.

In looking at the winners and losers in the Royal Commission Report, it is tempting to identify private corporations - especially financial institutions - as winners, and governments as losers. Indeed there is much in the Report that would tend to confirm this view. The problem with this view is that the conflict over the role of government is largely a conflict among private individuals. Thus while there is no doubt that the owners of private financial institutions and others with a vested stake in the private pension system were winners in the Report, the losers have still not been clearly identified if we describe 'governments' as the losers. Unfortunately the losers are today's retirees and the bulk of the labour force, who require increased public pension benefits if they are to enjoy a financially secure retirement.

41 According to the Report, 'there is general agreement that retirement is an individual matter and that ultimately the individual is responsible for his or her own retirement. The Commission places the prime responsibility for providing retirement income on the individual. Individual needs and desires require flexibility, which cannot be given by group programs or universal social programs (I, 18). See also I, vii and viii, where the Commission outlines three points that represent 'the essence of its thinking at the close of its deliberations.'

BIBLIOGRAPHY

- Asimakopoulos, A. and J.C. Weldon (1968) 'On the theory of government pension plans.' Canadian Journal of Economics 1, 699-717
- Canadian Life and Health Insurance Association (1981) A Discussion Paper on a National Pension System (Toronto)
- Cooper, Keith (1981) 'Study of public sector pension plans.' Pp. 113-74 in Vol. VII of Report (1981)
- Coward, Lawrence E. (1977) Mercer Handbook of Canadian Pension and Welfare Plans (Don Mills: CCH Canadian)
- Donner, A. and F. Lazar (1981) 'A review and critical analysis of economic literature on social security.' Pp. 160-96 in Vol. V of Report (1981)
- Economic Council of Canada (1979a) One in Three: Pensions in Canada to 2030 (Ottawa: Minister of Supply and Services)
- (1979b) Responsible Regulation: An Interim Report (Ottawa: Minister of Supply and Services)
- Health and Welfare Canada (1978) Canada Pension Plan Contributions (Ottawa)
- Lett, Tristram S. (1977) 'Saving or consumption? The role of the public pension plan in the national economy.' Speech delivered to the Association of Canadian Pension Management, Vancouver, 19 September
- MacEachen, Allan J. (1980) The Budget (Ottawa: Department of Finance, 28 Oct.)
- Macpherson, C.B. (1962) The Political Theory of Possessive Individualism Hobbes to Locke (London: Oxford University Press)
- Patterson, Keith (1981) The Effect of Provincial Borrowing from Universal Pension Plans on Provincial and Municipal Government Finance. Discussion Paper 192 (Ottawa: Economic Council of Canada)
- Pesando, J.E. and S.A. Rea, jr (1977) Public and Private Pensions in Canada: An Economic Analysis (Toronto: Ontario Economic Council)
- Rea, S.A., jr (1981) Redistributive Effects of Canada's Public Pension Programs (Ottawa: Economic Council of Canada)
- Report (1981) of the Ontario Royal Commission on the Status of Pensions in Ontario (Toronto: Government of Ontario)
- Task Force (1979) on Retirement Income Policy.' The Retirement Income System in Canada. 2 vols (Ottawa: Minister of Supply and Services)

- U.S. Department of Health, Education and Welfare (1979) 'Social Security Programs Throughout the World' (Washington: HEW)
- Weldon, J.C. (1981) 'Pensions are not savings.' Paper presented to the pension conference of the Center for Policy Alternatives, Montreal, 22 March. Unpublished
- Wolfson, Michael (1981) 'Design alternatives for the expansion of mandatory pension programs.' Paper presented to the pension conference of the Center for Policy Alternatives, Montreal, March 22. Unpublished

James E. Pesando

INTRODUCTION

The cornerstone of the recommendations of the Royal Commission on the Status of Pensions in Ontario is a Provincial Universal Retirement System (PURS), a mandatory money-purchase plan in which all workers in Ontario aged 18 to 64 would be required to participate. In addition, the Royal Commission makes detailed recommendations regarding: (1) the reform of occupational pension plans in Ontario; (2) the role of the Canada Pension Plan (CPP), Old Age Security (OAS), the Guaranteed Income Supplement (GIS), and the Province of Ontario's Guaranteed Annual Income System (GAINS) in providing retirement incomes; and (3) the costing (and level) of the benefits provided by occupational pension plans in the public sector in Ontario. Each of those subjects is analysed in this paper, although the emphasis, as in the Report itself, is on PURS and the reform of occupational pension plans in Ontario.

Where applicable, the analysis draws attention to such economic issues as the role of compensating wage differentials, the incidence of employers' contributions to occupational pension plans, and the possible income redistributive effects of various reforms. These economic issues may merit more attention than they often receive from those who study Canada's retirement income system. Generally, policy-makers who advocate reform tend to show a distinct distrust of market outcomes. Yet, if rational workers with full information enter into voluntary employment contracts, then those contracts must be regarded as efficient and the need for policy initiatives is therefore non-existent. Although most analyses may regard the latter position as untenable, perhaps because of its requirements for full information, policy-makers' general distrust of market solutions may also be open to question. Those issues are discussed later in this paper.

THE PROVINCIAL UNIVERSAL RETIREMENT SYSTEM (PURS)

The mandatory, money-purchase plan

PURS is a mandatory, money-purchase (defined contribution) savings plan that all workers in Ontario aged 18-64 would be required to join, unless they were already members of occupational pension plans providing at least an equivalent money-purchase benefit. Employers and employees would both make contributions based on earnings up to the average industrial wage (AIW), while both the year's maximum pensionable earnings (YMPE) and the year's basic exemption (YBE) would be the same as for the CPP. The contribution rates would be set by the government on the basis of the percentage of the AIW that it wished the mature PURS to replace, perhaps 15 to 25 per cent. When combined with the income replaced by OAS (at present, somewhat less than 15 per cent of AIW) and the CPP (25 per cent), the total income replaced by mandatory government plans would be between 55 and 65 per cent of the AIW. All contributions would vest immediately and be 'locked-in' (although a refund of employees' contributions would be available to persons whose incomes were below the YBE) and would be fully portable. Benefits, payable any time between age 65 and 71, would be in the form of a range of annuity options. The primary benefit would include a mandatory surviving spouse's benefit of at least 60 per cent of the basic pension unless the spouse waived this benefit in writing. Annuities for both male and female employees would be purchased on the basis of unisex mortality tables.

Universal coverage: the problem of the worker with low lifetime earnings

In recommending that PURS be mandatory, the Royal Commission is clearly influenced by the lack of coverage by occupational pension plans of a substantial proportion of workers in Ontario. The Commission estimates, for example, that only 49.4 per cent of men working in the private sector in Ontario are at present covered by an occupational pension plan, and only 21.7 per cent of women.¹

¹ Task Force on Retirement Income Policy (1980, Vol. 1, 43) estimated that, for all of Canada in 1976, somewhat less than 60 per cent of men aged 25 to 64 who were paid workers in the private sector belonged

According to received economic theory, if employers are required to offer pension plans, the incidence of the employer's contributions will fall ultimately on the employee. Therefore, workers, including many with low lifetime earnings, will be required to allocate a larger fraction of their lifetime earnings to provide for their retirement years. On the one hand, this will gradually reduce the likelihood of future claims on income-tested programs such as GIS and the various provincial supplements such as GAINS. On the other hand, by forcing persons with low lifetime earnings to provide a larger share of their own retirement incomes, this proposal may redistribute income away from those with low lifetime earnings.

There are at least two salient facts to be noted. First, according to information obtained by the Task Force on Retirement Income Policy from income tax records, persons whose earnings are low are less likely to be members of occupational pension plans. Second, as the figures compiled for the Royal Commission illustrate,² low-income Canadians generally choose not to contribute to RRSPs. Given the low value to them of the tax subsidy associated with RRSP contributions, together with the likelihood that they would be substituting their own savings for retirement for benefits available from income-tested public programs,³ this decision is probably rational. Thus the fact that coverage is low in industries in which the lifetime earnings of workers are likely to be low may reflect the lack of demand by such workers for occupational pension plans.

The fact that persons with low lifetime earnings might inadvertently be made worse off by a universal pension plan is an important point that should be taken into consideration when a new system is being planned. The Royal Commission does recommend that employees' contributions below

to occupational plans, compared to 33 per cent of women. By contrast, coverage was virtually complete in the public sector.

- 2 See Volume 8 of the Report, by H. Weitz. In 1975, for example, the proportion of tax-filers in Ontario with incomes of \$3,000-3,999, \$4,000-4,999, and \$5,000-5,999 who made contributions to RRSPs were 0.9, 1.5, and 1.9 per cent respectively. By contrast, the figures for those with incomes of 10,000-14,999, \$15,000-19,000, and \$20,000-24,999 were 12.1, 21.9, and 35.4 per cent respectively.
- 3 For single pensioners receiving GIS benefits, the benefit is reduced by \$0.50 for each dollar of additional income from other sources. For GAINS, the 'tax-back' feature is 100 per cent; that is, each dollar of additional income received by a current GAINS recipient causes his payment from GAINS to fall by a full dollar.

the YBE be refunded. Yet, as noted previously, economic theory predicts that the ultimate incidence of an employer's contributions will also fall upon the employee, who will therefore receive lower current wages than would otherwise be the case. This fact, too, must be factored into any calculation of the extent to which exemptions, tax credits, or other devices are necessary to prevent a mandatory increase in pension coverage from redistributing wealth away from workers with low lifetime earnings.

Finally, any mandatory pension plan would in effect require at least some Canadians to allocate a larger fraction of their lifetime earnings to their retirement years than they otherwise would. Although the Royal Commission discusses the attractiveness of providing incentives to individuals to provide for their own retirement, in proposing PURS, it in effect acknowledges that outright paternalism is an integral part of the proposed pension reform.

Extension of pension coverage

Defined-benefit versus defined-contribution (money-purchase) plans

The vast majority of members of occupational pension plans in Canada (93.6 per cent in 1978) are in defined-benefit plans. Yet the defined-benefit plan has come under increasing attack by those advocating pension reform, including the Royal Commission. Benefit accruals are quite small for young employees; the plans may be underfunded, and the security of the promised benefits may occasionally be placed in jeopardy; the portability of pension credits or years of pensionable service is difficult to achieve; only final-earnings plans preserve - on a contractual basis - the real value of benefits as they accrue during the member's active work years; and unless there is some form of contractual cost-of-living adjustments, all defined-benefit plans expose the pensions to erosion by inflation during the members' retirement years. By contrast, defined-contribution plans are aged-neutral, fully funded by definition, and fully portable; they vest immediately; and, because nominal interest rates compensate the investor for anticipated inflation, they preserve the real value of the member's benefit from anticipated inflation during both his active work and his retirement years.

In defined-contribution plans the link between the initial level of the pension benefit and pre-retirement earnings may be looser, thereby com-

promising at least superficially the government's income replacement objectives. However, this potential advantage of defined-benefit plans with an earnings-based benefit formula is greatly reduced by the fact that - at least in the private sector - this initial benefit is likely to be nominal rather than real (i.e. it is not indexed). Defined-contribution plans do expose their members to investment risk, although in principle members can limit the investment risk that they assume.⁴ Nevertheless, the Royal Commission should have addressed explicitly the problems posed by the uncertainty about the income replacement rate under a money purchase plan such as PURS. Equally important, the notion that in defined-benefit plans investment risk is transferred from the members to the sponsor is clearly mistaken during inflation.⁵ As noted by the Commission, the ad hoc cost-of-living payments to pensions in force made by at least some firms are based on the extent to which the actual investment earnings of the plan's fund exceed the rate assumed in the plan valuation.

The prevalence of defined-benefit plans suggests, at least superficially, that workers prefer this type of benefit formula. Their introduction may, however, have served in part as a means of providing workers with credits for past service when pension plans were first introduced. Their non-age-neutrality (i.e. the much more rapid rate of benefit accrual as the worker ages) may also reflect the greater concern by older workers with their level of income during retirement, as well as giving management an additional tool to reward long-service employees and thus to reduce turnover. On the other hand, the design and attendant funding arrangements are often not well suited to inflationary times. Indeed, the failure of the present system of (largely) defined-benefit plans to provide adequate retirement incomes in times of inflation is undoubtedly the prime catalyst to the present interest in pension reform.

- 4 For example, according to historical evidence, an investor could earn an inflation-adjusted, or real, return of 1 to 2 per cent if his funds were invested in short-term debt instruments such as commercial paper or Treasury bills, even during the past decade of high inflation. (Of particular interest in this regard is Table IX-2, p. 230, of Vol. 1 of the Task Force's study).
- 5 Even if this is true in non-inflationary times, shareholders are presumably compensated for assuming this risk since employees receive lower wages than they otherwise would.

Thus, in spite of the prevalence of defined-benefit plans, the case for mandating a universal defined-contribution plan - such as PURS - merits serious consideration, assuming that it has been decided to increase coverage.

Expanding the CPP to raise retirement incomes to today's workers

As some critics have noted, PURS would provide no significant increase in retirement incomes in the near future for the simple reason that contributions, and thus benefits, pertain only to future service. Since the incidence of employers' contributions is likely to fall ultimately upon the employee, PURS is a plan in which all participants must save from their current incomes to provide for their retirement.

Clearly, the CPP could be expanded in a manner that would increase the retirement incomes of workers who will be retiring soon by, in effect, providing them with benefits in excess of any required increase in contributions. The Commission argues persuasively, however, that an expansion of benefits on an income-tested basis, either through GIS or provincial 'top-offs,' is the best way to solve the problem of poverty among the retired. If the CPP were expanded, say, on a pay-as-you-go basis, then the increase in the net intergenerational wealth transfer would favour those with higher lifetime earnings.⁶ Even if CPP benefits are not expanded, the required contribution rate must inevitably be increased. This fact, combined with (1) the pay-as-you-go funding of OAS and GIS and (2) the significant aging of the Canadian population that will occur in the years ahead, means that contribution rates that workers in the future will have to pay in order to support these programs will be significantly higher than they are today.⁷ In order to retain the flexibility to provide

6 This result, which is linked to the fact that CPP benefits are based on earnings, is explained in detail in Pesando and Rea (1977) and more recently in Rea (1981).

7 The Economic Council of Canada (1980, 98) estimates, for example, that if present C/QPP, OAS, and GIS benefits are only preserved in real terms, then the fraction of GNP necessary to meet this commitment will rise from 3.1 per cent in 1981 to 5.2 per cent in 2031 under medium demographic projections. If OAS and GIS benefits are indexed to wages rather than prices, so that the beneficiaries of these programs share future increases in productivity, this ratio would rise to 7.3 per

improved benefits to the elderly poor through the income-tested programs, there is a persuasive case for not expanding the CPP in such a manner as to produce a further net intergenerational transfer to today's workers.

Other issues

Surviving spouse's benefit

The Commission recommends that the annuities purchased under PURS be required to contain a 60 per cent surviving spouse's benefit, unless the spouse waives this benefit in writing. Because PURS is a money-purchase plan, the surviving spouse's benefit would require an actuarial reduction in the annuity that would be payable in its absence. This point merits elaboration.⁸

The fact that women constitute a very high percentage of the poor among the elderly has been a major concern to those advocating pension reform. One proposed reform that would improve the situation of elderly women in particular is to require occupational plans to provide a surviving spouse's benefit.

If mandatory survivorship provisions are introduced, they could have one of two forms. Either the retiring married employee could be required to take an appropriate actuarial reduction in the pension benefit, or the survivorship provision could be automatic in the sense that no such actuarial reduction would be required. Under the first option, there would be no income redistributive effects between single and married employees. Under the second, married employees would benefit at the

cent, which is more than double its present level. The contribution rate for the CPP, if financed on a pay-go basis after the investment fund is exhausted (around the turn of the century), will rise from the present 3.6 per cent to 10.0 per cent of covered earnings in 2031. See Economic Council of Canada (1979, 98).

⁸ The Commission also recommends (No. 54) that all occupational pension plans should provide, as the normal form of the pension benefit, a surviving spouse's benefit of at least 60 per cent of the original pension benefit, to be waived only with the written consent of the employee and the spouse. The Commission further recommends that the plans be allowed to reduce the benefit actuarially so that the cost of the retirement benefit to a person with a spouse is the same as to a person without a spouse, although it does not specifically recommend that an actuarial adjustment be required.

expense of single employees. The first option could be introduced retroactively. If the second option were introduced retroactively, there would be an additional redistribution in favour of old employees at the expense of young employees. This would occur because the higher contribution necessitated by the improved benefit would be paid - either directly, or indirectly in the form of current wage concessions - for only a short time by those who are at retirement age.

There is a strong argument on income redistributive grounds for preferring the first option: married employees should be required to take an actuarially reduced pension, as would occur under PURS. The dramatic increase in the participation of women in the labour force, together with the affluence of two-income as compared to single-income households, increases the likelihood that the adoption of an unadjusted survivor's benefit would actually redistribute income from lower- to higher-income households. Both working spouses would, in this case, have unadjusted pensions with a survivorship provision.

Unisex mortality tables

The Commission recommends that a unisex mortality table be used to calculate the annuities that are purchased with the accumulated contributions to PURS. Because women live longer than men (in 1976, life expectancy at age 65 was 13.7 years for men and 17.9 years for women), the result would be on average to redistribute income from men to women. Because the purchase of such an annuity would be compulsory, so that (for example) men could not choose to self-insure, the proposal is feasible.⁹ Although the deliberate decision to override insurance principles will undoubtedly remain controversial, the use of unisex mortality tables in the context of PURS does not appear to be unreasonable.

9 The Royal Commission also recommends (No. 106), although not unanimously, that all annuities purchased with the proceeds of money purchase pension plans and RRPSs be calculated on the basis of unisex mortality tables. Since men would have an incentive not to purchase an annuity on these terms (and might, for example, choose to self insure or, what is perhaps more likely, to use other assets to purchase annuities so that unisex mortality tables would not be required), this scheme may be less feasible.

THE REFORM OF OCCUPATIONAL PENSION PLANS

Vesting

At present, the Pension Benefits Act of Ontario requires that an employee's benefits vest after he has reached age 45 and completed ten years of service. If an employee leaves a plan before his benefits vest, then he normally receives only his own contributions, usually with interest. In a non-contributory plan, he receives nothing.

The universal recommendation of all the main studies of Canada's retirement income system is that minimum vesting provisions be relaxed. The Commission recommends that an employee's benefits vest after ten years of service or plan membership if PURS is adopted, and after five years of service or plan membership if PURS is not adopted. The Economic Council of Canada recommends graded vesting, with 20 per cent of the benefit being vested after each year until full vesting is achieved after five years of service, or when age plus years of service equal 35.

The move toward earlier or immediate vesting will probably lead employers to offer other incentives to reduce turnover and to retain skilled employees - for example, wage grids that are more steeply graded with respect to years of service. Mobile employees may thus incur costs analogous to, but less discontinuous than, those resulting from deferred vesting. In spite of this caveat, the recommendation that statutory vesting rules be relaxed has merit. If anything, the proposals made by the Royal Commission appear to be less liberal than those made by most other advocates of reform.

The advantage to a young member of a contributory, defined-benefit plan with less stringent vesting may well prove illusory. Particularly when nominal or market interest rates are high, as they are today, the employee's own contributions are likely to purchase all of the accrued benefit to which he is entitled. That is why the Commission proposed that the employee's own contributions, at an interest rate 1 per cent less than the annualized rate paid by the chartered banks on non-chequing savings accounts, can be applied to the purchase of at most 50 per cent of the cost of the deferred annuity, with an excess to be refunded to the employee. As noted in the next section, however, even this parallel initiative is not likely to prove satisfactory in times of inflation.

Portability

For all practical purposes, the Royal Commission does not address the problems arising from the lack of portability of occupational pension plans. For contributory plans, the Commission recommends that the terminating employee be allowed to transfer one-half of his accrued benefit to a 'locked-in' RRSP, to PURS, or to the new employer's pension plan provided that the new employer agrees to accept the transfer. For non-contributory plans, no changes are proposed. Furthermore, unlike some of the Commission's recommendations, there is no alternative proposal if PURS is not adopted. The Commission goes so far as to note that it is 'impossible to achieve portability in a system of individual employer plans' (Summary Report, 3).

One cannot emphasize enough the extent to which the absence of more portable pensions, especially during inflation, limits the effectiveness of the occupational pension system. Consider the case of an employee who terminates at age 45, receiving a deferred annuity to commence at the normal retirement age (under the plan) of 65. If the inflation rate is 6 (10) per cent, the real value of the deferred annuity will have fallen to 31 (15) per cent of its initial value before the employee begins to receive his pension! The lump sum necessary to purchase the deferred annuity will, of course, fall as the interest rate rises, reflecting the expected erosion - as reflected in the inflation premium built into the interest rate - of the fixed-dollar benefit during both the period between termination and retirement and the employee's retirement years.

The Task Force on Retirement Income Policy recommended that the deferred annuities of terminated vested employees be updated by the original employer. This proposal, however, has little merit and the Commission is correct in ignoring it.¹⁰ There is, however, another means by

10 The Task Force recommends that one of two schemes be adopted to update deferred pensions, depending upon the benefit formula. For a final or best-average earnings plan, the Task Force recommends that the deferred pensions earned by a terminating plan member be revalued between the termination date and normal pensionable age by a wage and salary index. For all other defined-benefit plans, the vested benefits are to be updated by an amount no less than the amount by which the benefits would have been updated had the employee remained at the same job. The latter attempts to gain for terminated employees the same benefit provided active members by the periodic amendments that

which deferred pensions would be accorded improved cost-of-living protection. Sponsors of defined-benefit plans could be required to cost the deferred annuities payable under the terms of their plans on the basis of a real interest rate. To the extent that prevailing markets rates are higher by virtue of their incorporation of an inflation premium, the capital sum implied by the real rate will be more than that required to buy a fixed-dollar deferred annuity. The surplus, in effect, is to provide the amount necessary to offset the erosion of the real value of the pension implied by the expected rate of inflation - as reflected in the market interest rate - at the time the deferred annuity is purchased. The transfer of the present value of the deferred annuity, calculated at a real rate, to a 'locked-in' RRSP would preserve, at least in principle the real value of the benefit during both the employee's active work and his retirement years. The result parallels the use of performance indexing (i.e. the use of 'excess' investment earnings) as a means of providing cost-of-living pro-

are generally made to career average and flat benefit plans. This latter proposal in particular is not likely to prove workable, and both are likely to be resisted - with some justification - by employers.

Assume that labour markets are perfectly competitive and hence that in each period workers must receive total compensation equal to the market value of their labour. If, as part of an increase in total compensation paid to active workers, the employer enriched the pension benefit formula, he would be required to make additional payments on behalf of terminated, vested employees. There is no incentive for active workers to make wage concessions to offset these additional payments. Employers would thus have a strong incentive not to enrich pension benefit formulas, but to increase the compensation paid to active workers only by increasing their current wages. If the purpose of the initiative is to extend to terminated employees the improved pension benefits accorded active employees, it will fail. Indeed, by actively discouraging employers from enriching their benefit formulas, it will counteract the intent of proposed pension reform since it will reduce the delivery of retirement incomes by occupational plans. If the wage and salary index used to update the vested benefits of members of final earnings plans is an economy-wide index, as suggested by the Task Force, the analogous disincentive is removed. The difficulty with this proposal is that it fails to recognize that real wages across firms vary and should continue to vary in response to market forces. For industries in which market conditions dictate below average increases in real wages, perhaps for extended periods, the prospect of requiring the employer to provide - in effect - larger increases in pension benefits for terminated than for active employees is difficult to justify.

tection for pensions-in-pay.¹¹ If the mobile employee had belonged to either a series of final earnings plans or career average plans, amended to offset the impact of inflation on the benefits provided still active workers, the actual pension would resemble the benefit provided by a career average plan in which each year's earnings had been updated for inflation. Sufficient funds would exist, again in principle, to preserve fully the real value of this benefit during the employee's retirement years.¹²

Two complications of this proposal must be noted. First, if the pension plan provided by the original employer is not well funded, then transferring the lump sum equivalent to a 'locked-in' RRSP could in fact favour the terminating employee at the expense of the on-going employee. This fact suggests that the degree of funding might have to be factored into the calculation of the size of the lump sum transfer, at least until the

11 If desired (and I think it is not), the scheme could be adjusted to provide - again in principle - for real increases in the value of the deferred pensions. Suppose that the real interest rate employed to capitalize the defined benefit is 3 per cent. If one wanted to provide the terminating employee with sufficient funds that the real value of his deferred pension could be increased, one could simply lower this discount rate. If the rate were lowered to 2 per cent (which would then raise the capital sum necessary to pay for the defined benefit), then - in principle - the real value of the deferred pension could rise at 1 per cent a year during both the employee's active work and retirement years. If the 2 per cent rate were applied only to the period between the date of termination and normal retirement age, but the 3 per cent were used to calculate the value of the annuity itself, then the capital sum would be sufficient to permit the real value of the deferred pension to rise by 1 per cent a year through the date of retirement and to remain constant in real terms thereafter. Again, the 'in principle' caveat is necessary because improvement is analogous to that of performance indexing. Like the updating of deferred pensions in line with an economy-wide wage or salary index, the scheme could result in persons with deferred pensions receiving larger real increases than active plan members. The result is somewhat less visible, and the quid pro quo is that those with deferred annuities remain subject to the investment risks that accompany performance indexing.

12 Indeed, the use of a statutory real interest rate to cost deferred annuities payable under the terms of defined-benefit plans could be the first step in a scheme to provide fully portable pension credits. Since the accrued benefits of the terminated employee are all that matters, no salary scale is necessary to calculate the lump sum payment necessary to purchase the deferred annuity. The problem of providing portable benefits is then reduced - as a first approximation - to calculating the number of years of pensionable service that this lump sum can purchase - given the age of the employee - under the terms of the plan provided by the new employer.

funded status of existing, especially flat benefit plans, is improved. (It is significant that the Commission makes several recommendations intended to improve the degree of funding in defined-benefit plans, as an alternative to plan termination insurance). Second, by focusing attention on the necessity to value deferred annuities on the basis of a real interest rate if they are to be preserved, at least in principle, in real terms, this approach draws attention to the broader issue of the appropriate costing (and hence design) of a defined-benefit plan in times of inflation. This issue will be discussed below.

Finally, the equity, to both the employer or shareholder and the employee, of this and related proposals merits comment. The issue of employee valuation of pension claims, and hence of the extent to which current wages have been traded off for pension benefits, is complicated.¹³ So long as employees - in either formal or informal bargaining - have traded off current wages for pension benefits with the full recognition that the latter do not have full cost-of-living protection, then the above proposal would provide a windfall gain to employees (at the expense of shareholders) if introduced retroactively. More generally, the application of many reforms to past service credits may have this effect, and for that reason the application of most reforms only to future service is probably the only way to ensure that arbitrary gains and losses are not produced by pension reform. In the present context, the use of a real interest rate of, say, 3 per cent with respect to future service, and, possibly, the use of the plan's valuation rate with respect to past service, is perhaps the fairest way to implement the reform.

Security of benefits

Flat-benefit plans provide a nominal benefit that is usually improved - and extended to past service credits - each time the union contract is renegotiated. The resulting amendments, which are usually designed at least to offset the impact of the inflation that has occurred since the prior contract was signed, are unfunded and may be amortized by special payments over a period of usually fifteen years. The succession of plan amendments virtually guarantees that the plan will have large unfunded

13 For a formal analysis of this issue, see Pesando (1981).

liabilities, especially in times of inflation.¹⁴

Many observers now express the concern that a firm's insolvency or the shutdown of a major plant could result in employees failing to receive the full value of their vested benefits, especially in flat benefit plans. Indeed, in response to just this threat, the Province of Ontario has drafted regulations that would set up a Pension Benefits Guarantee Fund to administer plan termination insurance.

The Commission also acknowledges the threat to the security of pension benefits arising from the existence of large unfunded liabilities, especially in flat-benefit plans, but it recommends against the introduction of plan termination insurance. Instead, the Commission recommends a series of changes designed to tighten funding requirements, including a greater standardization of actuarial funding methods and assumptions, together with the granting to the Pension Commission of Ontario the power to impose special, although unspecified, conditions on plan improvements in flat-benefit plans that result in initial unfunded liabilities. Although the maximum amortization periods of fifteen years for initial unfunded liabilities and five years for experience deficiencies would remain unchanged, the 'test' valuation that now permits the treatment of certain experience deficiencies as initial unfunded liabilities for amortization purposes would be eliminated. The need for plan termination insurance should be discussed further.

The question whether the funded status of occupational pension plans ought to be of concern to policy-makers, although perhaps obvious to most observers, merits a preliminary comment. If workers or their representatives appropriately 'discount' contractual pension claims in less well funded plans (i.e. by accepting a smaller reduction in current wages, given the improvements to the pension plan, than would be the case in better funded plans), then, from the viewpoint of ensuring that workers

14 Most plans permit the sponsor to terminate the plan, with the employer's obligation equal to the lesser of the vested benefits and the assets in the plan. These provisions notwithstanding, many observers have argued that the implicit liability of the firm, so long as it is an on-going concern, is to honour all vested pension claims. Even if this were the case, however, the possibility of a firm's insolvency would still link the existence of unfunded vested benefits to the real possibility that members of flat benefit plans may ultimately forfeit some fraction of their vested benefits.

receive the value of their labour, there is no legitimate source of concern for policy-makers. (If policy-makers are concerned with the workers' retirement incomes per se, this concern may be legitimate.) If, on the other hand, workers or their representatives treat contractual claims in less well funded plans as if they were payable with certainty by making wage concessions, then the concern of policy-makers is clear. In this case, however, the real issue is the mistaken assessment by workers of the value of their pension claims in the context of compensation 'trade-offs,' not the existence of unfunded liabilities per se. The Commission expresses its concern that workers are not well informed about the possibility of benefit cut-backs in underfunded plans. It is interesting that for state and local government plans in the United States (which are not covered by the Employee Retirement Income Security Act of 1974 and thus are not covered by plan termination insurance), there is some preliminary evidence that at least some groups of workers do discount the value of promised benefits in less well funded plans by granting smaller wage concessions than for equivalent benefits in better funded plans.¹⁵

In fact, and contrary to the suggestion of the Commission, a plan termination insurance scheme that is both (1) actuarially sound (and thus not a drain on public funds) and (2) equitable (in that the premiums paid are linked to the funded status of the individual plans) could be designed, at least in principle. There are three persuasive arguments against the introduction of plan termination insurance: (1) such a plan, if it is to be equitable, must inevitably be complex; (2) there are other, simpler ways of tightening funding requirements, and (3) the introduction of plan termination insurance could arbitrarily, and perhaps inadvertently, redistribute wealth from shareholders to employees in underfunded plans. In the context of (2), the Commission makes the very sound recommendation that improved disclosure to plan members of the implications of the funded status of the plan be required, in part to ensure that collective agreements are made with full information about the implications of the funding decision. When combined with the recommendation that the priorities of different claims under plan wind-up be defined explicitly by the Pension Benefits Act, it is likely that the funded status of the plan will become a more central focus of collective bargaining than has been the case. In

15 See, for example, Smith (1980) and Inman (1980).

conjunction with the tighter funding requirements recommended by the Commission, these proposals will largely eliminate the need for plan termination insurance. In addition, the introduction of retroactive plan termination insurance could arbitrarily redistribute wealth from shareholders to employees with prior service credits if (1) employees had previously discounted the value of poorly funded pension benefits and (2) competitive pressures ensured that workers always received compensation equal to the full value of their current labour services.

Finally, it should be emphasized that the underfunded status of flat benefit plans (and, to a lesser extent, career average plans) can be traced to retroactive improvement in nominal benefits designed to offset the impact of inflation. If plan sponsors and their employees were required to use a real interest rate to value all benefits, both before and after retirement, then the degree of funding in flat benefit plans would improve dramatically. In effect, plans would be required to pre-fund the retroactive cost-of-living adjustments that are usually made with each round of collective bargaining. To the extent that retroactive plan amendments are intended primarily to offset the impact of inflation, the periodic creation of unfunded liabilities as the byproduct of these amendments would largely disappear. The use of a real interest rate to value deferred annuities was discussed above in the section on portability, and it will be discussed again in the next section. In the present context, the use of a real interest rate to value defined-benefit plans would, by itself, significantly improve the funded status of such plans.

Cost-of-living protection

The inflation tax credit

To address the problem of the erosion of retirement incomes by inflation and to ensure that members of occupational pension plans do not receive any special government subsidy, the Commission proposes changes in the relevant income tax acts to introduce an inflation tax credit. The refundable tax credit would be designed to protect from inflation a measure of total retirement income (say, twice the total of OAS and the maximum CPP in the year in which the tax credit is claimed), which would be adjusted on the basis of cumulative changes in the consumer price index.

Presumably as a cost-saving device, and entirely arbitrarily, the tax credit would be available only to persons aged 68 or over, which is three years after the age of entitlement under most public pension programs and the normal retirement age under most occupational plans.

The operation of the tax credit is somewhat complicated,¹⁶ but only the concept needs explicit attention. In fact, the inflation tax credit as proposed would serve to 'double index' the incomes that are already being adjusted for inflation. The Commission notes (Vol. 2, 250) that a pension that is already indexed (for example, the pension arising from a defined-benefit plan in the public sector) would be subject to double indexing under the proposed scheme. Equally important, and not acknowledged by the Commission, this would also be the case with *any* money-purchase plan - such as PURS - to the extent that an appropriate inflation premium had been embedded in the interest rate used to determine the annuity that the accumulated contributions could buy. Assume, for example, that in a non-inflationary economy the real interest rate is 3 per cent. A lump sum payment of \$85,300 would thus buy a \$10,000 annual pension, payable with certainty for ten years. In an inflationary economy, with borrowers and lenders alike expecting an inflation rate of, say, 9 per cent, the interest rate would rise to 12 per cent. As a result, the lump sum payment of \$85,300 would buy a \$15,097 annual pension, again payable with certainty for ten years. Only if inflation turned out to be greater than 9 per cent would it be correct to assert that inflation is redistributing wealth away from the pensioner. If the inflation rate were less than 9 per cent, the wealth redistributive effects of inflation would actually be in favour of the pensioner. In both cases, however, the inflation tax credit would seek to compensate the pensioner fully for inflation - subject to the ceiling on 'protectable income.' To eliminate this form of double indexing, the inflation tax credit should in principle apply only to unexpected inflation. In practice, such a scheme would be impossible to implement, since the extent to which inflation is unexpected would depend upon the inflation

16 See the example in Royal Commission (1971a, Vol. 2, 247-8) for details. In fact, the illustrative scheme would appear to require at least some technical revisions, since the inflation tax credit as calculated is at least slightly more generous than the amount necessary to achieve the stated objective of preserving the real value of the protected income.

premium embedded in the interest rate at the time that each annuity was purchased.

In short, as the Commission acknowledges, it would be a waste of time to eliminate indexed pensions explicitly from the inflation tax credit, since rational employees and their plan sponsors would presumably redesign their benefit formulas to ensure that members would be eligible to receive the inflation tax credit. Equally important, the proposal would 'double index' the benefits payable under all money-purchase plans to the extent that pensioners had already been compensated for inflation by the inflation premium built into the interest rate used to cost the annuity. There is no easy way in which the inflation tax credit could be redesigned to solve this problem. On balance, the costs to the taxpayer of the inevitable double indexing under the inflation tax credit, together with the arbitrary postponement of eligibility to age 68, make this proposal an unattractive means of improving cost-of-living protection for pensioners. As explained below, there is no need to invoke the taxing powers of government to improve the cost-of-living protection accorded members of occupational pension plans. What is required is the use of real interest rates to value the pensions due under the terms of defined-benefit plans, in conjunction with the Commission's own, although not widely cited, suggestion that 'excess interest' earnings or performance indexing be used to accomplish this objective.

Performance indexing

In its 139th Recommendation, the Commission proposes that the Pension Benefits Act be amended to require every pension plan to give the retiring employee the option of a participating annuity. A participating annuity is one that guarantees a basic monthly payment increased by any additional earnings on the capital above those required to pay the basic amount. In effect, a participating annuity exploits the 'excess interest' principle, which recognizes that the inflation premium built into interest rates is the logical source of the funds necessary to deliver cost-of-living protection to the relevant annuities. What is not clear in the Commission's recommendation is the interest rate to be employed to identify the 'excess interest' earnings, because the recommendation refers only to the fact that the Pension Commission of Ontario should regulate the interest rate.

If the interest rate chosen to identify 'excess interest' earnings is a

real interest rate of, say, 3 per cent, then performance indexing is likely to provide an adequate degree of cost-of-living protection. This fact can be seen in the simulations performed by the Task Force on Retirement Income Policy.¹⁷ On the assumption that the plan's assets are fully invested in 90-day commercial paper that produces a real return of 2 per cent, the Task Force's simulations show that the use of 'excess' earnings (in this case, more than 2 per cent) would have been sufficient to offset virtually all of the effect of inflation during the period 1962-78. Using a 2 per cent return with the plan's assets fully invested in long-term bonds, the real value of the pension in 1978 - sixteen years after its commencement - would have been 83 per cent of its original value. If the pension had not been indexed, its real value would have fallen to 43 per cent of its initial value. It is significant that these simulation results were obtained for a period of almost secularly rising inflation. Since the real returns provided by fixed-income investments are likely to be low in such periods, the simulation results indicate the probable success of performance indexing even under the most adverse of circumstances.

A conservative estimate of the real return on a diversified portfolio of fixed-income securities would be 2 to 3 per cent. Historical data suggest that a figure of 3 to 4 per cent would be appropriate if equities were included in the plan's portfolio. These figures suggest that a real return assumption of 3 - or at most 4 per cent - would be appropriate if a performance indexing scheme were introduced with the explicit goal of approximating full cost-of-living protection.

There are a number of unanswered questions about the mechanics of a performance indexing scheme.¹⁸ Of particular importance, however, are

17 See, especially, Table IX-2, Vol. 1.

18 These include: the use of a 'benchmark' as opposed to the plan sponsor's own portfolio to define 'excess' investment earnings; the choice of the real interest rate; the use of the total income from the portfolio or just that from the fixed-income portion to define excess earnings; and the mechanism by which surpluses (if excess earnings exceed the amount necessary to offset fully the impact of inflation) and perhaps deficits (if the actual investment earnings are in fact less than the real interest rate) are to be 'banked' for the future. Three criteria are relevant to the ultimate design. First, the scheme must be designed so as to provide in advance a high degree of protection against inflation. Second, the incentive for the plan's sponsor to achieve a favourable investment return must remain as intact as possible. Third, any distorting or disruptive impact on the capital market emanating from revised investment incentives to spon-

three related issues. First, in view of the assumptions now being employed to value (and thus cost) defined-benefit plans (Table 1), the introduction of performance indexing with respect to a statutory real interest rate of, say, 3 per cent will require a sharp increase in required contribution rates, especially for some plans, even if the concept is not applied to deferred annuities of vested employees. (See the discussion above of portability.) Second, to prevent the arbitrary redistribution of wealth from shareholders and employers to employees with past service credits under the terms of the plan (and also to prevent the creation of large unfunded liabilities), the performance indexing should not be retroactive. Employees could, however, be given the option of having performance indexing applied to past service credits in exchange for a scaling down of the value of these benefits, perhaps on the basis of the relationship between the interest rate now used to value the plan and the statutory real interest rate. Third, as in the case of using a real interest rate to identify the lump sum due to a terminating employee who is entitled to a deferred annuity, the implementation of performance indexing requires that the plan be adequately funded.

When one contemplates the adequacy of the occupational pension system in times of inflation, a continuing theme emerges. This is the importance of costing the pension benefit formula against the benchmark of a 'non-inflationary' environment so that both the employer and the plan's members understand the true cost of the benefit if it is - at least in principle - to be preserved in real terms during both the accrual period and retirement. These costs, which the plan's sponsors and their consulting actuaries should be required to calculate, are of crucial importance to the design of the benefit formula.

At present, as evident from the assumption reported in Table 1, most occupational plans are valued on the basis of interest rate assumptions which imply that the contribution rates so established can be realized only if both accruing benefits and pensions in pay are eroded by the inflation rate implicit in the interest rate assumption. The use of a real interest rate of, say, 3 per cent to value both current and deferred annuities payable under the terms of the plan would identify the cost of indexing

sors, which could alter the objectives of portfolio composition, should be minimized.

TABLE 1

The interest rate assumption: number of plans surveyed by type and interest rate, Canada 1979

Interest rate (%): number of plans	Benefit formula		
	Final earnings	Career average	Flat benefits
less than 3	1	0	0
3.0 - 3.9	1	0	1
4.0 - 4.4	8	4	3
4.5 - 4.9	19	3	7
5.0 - 5.4	18	10	7
5.5 - 5.9	37	16	6
6.0 - 6.4	12	1	1
6.5 - 6.9	12	3	1
7.0 - 7.4	8	0	0
7.5 and above	1	1	0
Mean	5.59	5.51	5.10
Total number of plans	117	38	27

SOURCE: Based on data in Financial Executive Institute Canada (1980, Appendix J)

benefits in pay. The use of a real interest rate to value accruing benefits (with the corresponding use of a real salary scale, if required) would also identify the cost - again in principle - of price-indexing the accumulating credits of active employees. For flat benefit and career average plans in particular, the required increases in contribution rates if accruing benefits are to be preserved in real terms are likely to be considerable. Only when sponsors and their employees are fully aware of these costs will they choose an appropriate benefit formula.

ADDITIONAL ISSUES

Funding the Canada Pension Plan

The Commission recommends that the CPP be funded on a pay-go basis. Specifically, the present combined contribution rate of 3.6 per cent should

continue unchanged until the existing fund is reduced to the level required to satisfy twice the year's benefit and administrative cost pay-out, three years in advance. When an increase in contribution rates on a pay-go basis is required, this increase is to be phased in gradually by making changes in the contribution rate six years in advance of the required increase, always maintaining the contingency fund as described above. If there is to be any enrichment in the benefit formula under the CPP, then this enrichment should also be funded on a pay-go basis, again subject to the contingency fund.

This latter recommendation, it should be noted, is in sharp contrast to the proposals made by others who have studied Canada's retirement income system. The Special Senate Committee on Retirement Age Policies recommended that the ceiling under the C/QPP be raised by 50 per cent to 1-1/2 times the average industrial wage and that contribution rates be raised from the present 3.6 per cent to 8 per cent of covered earnings, to be phased in over a period of two years. The Quebec (Cofirentes) Report recommended in 1978 that the income-replacement rate be raised from 25 to 50 per cent of the first half of the maximum pensionable earnings while remaining at 25 per cent for the second half. The Committee also recommended a corresponding increase in the contribution rate, which would be set at 6.8 per cent for the next five years, with modest increases to follow. The Economic Council of Canada, although not recommending that the CPP be expanded, argued that any increase in the CPP benefit package should be fully funded. Although the Commission does not recommend that the CPP be expanded, its insistence on pay-go funding - even in the case in which the CPP benefit package is enriched - merits comment.

In arguing against an increase in the funding of the CPP, the Commission appears to be concerned primarily with the encroachment on the private sector that might occur if a large CPP investment fund were to accumulate. Yet, as discussed at length by the Task Force on Retirement Income Policy, there are other ways of investing CPP funds - including procedures that would leave most of CPP investment decisions in the hands of the employers who collect the contributions - that could address this legitimate concern. The Commission also emphasizes the potential size of the CPP investment fund, which would rise from \$14.3 billion in 1978 to \$9 trillion in 2030, if present contribution rates were raised to 12.53 per cent in 1980. This is the rate that the Commission estimates would be required

to fund the CPP fully and to amortize the current unfunded liabilities over fifty years. The Commission observes (Summary Report, 23) that 'Canada's foreseeable capital requirements cannot accommodate investment of such large amounts.' In fact, this objection would appear to be misplaced for at least two reasons. First, the choice is not likely to be between the two extremes of pay-go or full funding (inclusive, in the Commission's illustrations, of the amortization of existing unfunded liabilities), but rather of the degree of (partial) funding. Secondly, and ignoring the problem of existing unfunded liabilities, the simple fact is that if, in the absence of the CPP, today's workers wished to save enough to duplicate the 25 per cent (of the AIW) replacement rate of the CPP, then they would have to accumulate a like amount of funds. If these savings proved to be 'large' in relation to Canada's capital requirements, then the resultant downward pressure on Canadian interest rates would simply lead to an outflow of capital to other countries.

In fact, there are at least two important objections to the pay-go funding of the CPP. First, as noted above, the fact that the CPP benefit is based on earnings implies that the intergenerational wealth transfers that occur under a pay-go scheme disproportionately benefit persons with high lifetime earnings. Second, also as noted above, the income-tested programs such as GIS and GAINS are the most effective means of channelling scarce government resources to the truly needy among the elderly.¹⁹ To the extent that the CPP is funded on a pay-go basis, and especially if it is expanded, the well documented aging of the Canadian population could cause the increasing effective tax burden on future workers to limit the flexibility to expand these needs-oriented programs or require an effective reduction in other public pension benefits, or both.

19 Two concerns with these income-tested programs remain: (1) the disincentives, both to saving for retirement and to work by those eligible to receive these benefits, and (2) the gap that might arise as the degree of income support provided the elderly poor rises in relation to that provided the non-elderly poor. In response to (1), it should be remembered that the tax-back rate under GIS is 50 per cent, so that eligible recipients do derive some benefit from additional work or saving. In response to (2), the Commission concludes that at present, in Ontario, married couples aged 65 or over are receiving an adequate level of income support through OAS, GIS, and GAINS, and recommends only an increase in the single supplement under GIS or, in the interim, under GAINS.

The Commission addresses this problem indirectly by noting that the total dependency ratio (i.e. the ratio of old and young dependents to the working population) is expected to decline gradually from 1980 to 2010. The Commission acknowledges that it costs more to support old than young dependents, but fails to note the important distinction between the marginal and average costs of supporting these dependents. To the extent that there are fixed costs in the form of capital (e.g. schools with few alternative uses) or labour (e.g. administrative or bureaucratic personnel), the use of the average costs to the taxpayer of young dependents could overstate the release in real resources that would occur as the ratio of young dependents to the working population decreases.

In short, the Commission's arguments against funding, or partially funding, the CPP, especially if its benefits were to be expanded, are not persuasive. The Commission appears to be both too worried about the problems posed by the accumulation of a large CPP and too sanguine in its assumption that demographic trends in conjunction with pay-go public plans (including OAS, GIS, and GAINS, as well as the CPP) do not portend a significant increase in the tax burden on future generations of workers.

Finally, as the Commision notes, there is no reason why contributors to the CPP should continue to subsidize current and future taxpayers by accepting below-market returns on their investments. At present, the provinces pay an interest rate equal to the rate on Government of Canada bonds with a maturity of twenty years or more, which is less than the rate than they would have to pay in the open market. The Commission recommends that the investment structure of the CPP be altered, so that, commencing in 1986, the provinces' existing obligations be replaced with twenty-year negotiable bonds to be issued by a provincial crown corporation and earmarked for capital investment and that these bonds bear a market rate of interest. Both recommendations are sound, although the possibility, if the degree of funding were raised, of devising a scheme whereby CPP funds could be invested in the private sector should also be considered.

Costing public sector plans in Ontario

The Commission recommends that all occupational plans in the public sector

in Ontario be regulated on the same basis as private sector plans and thus be subject to the provisions of the Pension Benefits Act. Of particular concern to the Commission is the issue of cost identification and control. The Commission objects, with justification, to the present procedure for funding (and, indirectly, 'costing') inflation adjustment or indexing provisions. In plans governed by the Superannuation Adjustment Benefits Act (including the Public Service Superannuation Fund, Teachers' Superannuation Fund, and so on), employers and employees each contribute one per cent of salary to pay for inflation adjustments to pensions in force. The Act provides for indexing to the consumer price index to a maximum of 8 per cent, with a carry-over provision if inflation exceeds 8 per cent in any given year. In fact, as the Commission notes, this funding procedure obscures the objective of identifying the true cost of the indexing provisions. The right way to calculate what contribution rates would be required if the contractual benefits are to be preserved in real terms, at least in principle, is to value the contractual benefits payable under the terms of the plans on the basis of a real interest rate. Equivalently, the basic plan could be valued on the basis of a nominal interest rate, with the inflation premium implicit in this nominal rate then used as the inflation rate to which the indexing provisions would apply. The concept underlying the Superannuation Adjustment Benefits Act (SABA) - namely, that the matching contributions are actuarially related to the projected costs of the indexing provisions - has no economic basis, and the Act should be rescinded.

The Commission argues that pension benefits in public sector plans should not lead those in the private sector. If compensating wage differentials do exist, and if the costs of pension benefits are correctly identified, then this concern can be ignored. As noted, however, the Commission is afraid that the true costs of certain of the provisions in public sector plans have not been recognized by the affected parties. In addition, the Commission notes that the pension benefits accorded public sector plans may, as a result of legislation, be directly or indirectly excluded from the collective bargaining process. In general, and subject to the caveats noted above, economic analysis tends to play down the importance of comparing the level of pension benefits *per se*. If comparisons are to be made, then they should focus on total compensation. The only exception to this rule occurs if a particular benefit is available

only in the public sector. Contractual indexing provisions, in particular, may rest ultimately on the government's ability to underwrite the attendant inflation risk by virtue of its taxing authority. For this reason, parallelism with respect to this particular feature of plan design may be desirable. If performance rather than contractual indexing is deemed to be satisfactory for private sector plans, then the replacement of contractual with performance indexing in the public sector would also be appropriate. Indeed, this has been proposed recently by both the federal government and the Government of British Columbia. If the federal government provides a vehicle (say, price-indexed annuities or a stabilization facility) to enable private sector plans to provide full and contractual indexing, then the present provisions in the public sector plans would presumably be retained.

There is, however, a final perspective from which to view this issue. If, for the sake of argument, full indexing of pensions were to be retained, how should this benefit be costed in order to determine the appropriate offset elsewhere in the compensation package? The answer is obtained by considering the situation of the plan sponsor in the private sector who wishes to provide a comparable benefit. If fully indexed benefits are to be paid with certainty by a private sector plan, then (1) the plan must be fully funded in view of the possibility of the firm's insolvency and (2) the funds must be invested in a portfolio whose real return is certain. In practice, (2) cannot be met, although it can be approximated if the plan's funds are invested exclusively in Treasury bills or commercial paper. They would then earn a real return of 1 to 2 per cent. If the indexing provisions in public sector plans are to be valued in parallel fashion, then the benefits payable under the terms of these plans must also be costed at 1 to 2 per cent. Since this is not the current practice, it is tempting to conclude that the value of the indexing provisions in public sector plans is being underestimated. In fact, the attempt to verify this conclusion is greatly complicated by the fact that employers and employees make 1 per cent matching contributions through the SABA, thus, in effect, lowering the reported interest rate assumption that is being used to value the annuities payable under the terms of the affected plans. For costing purposes, the basic benefits due under the terms of the plans should be valued on an interest rate of (at most) 2 per cent, and the contribution rates so determined then compared to those now

in effect. If indexing provisions in the public sector were appropriately valued, as above, then the need for parallelism as discussed previously would be removed.

BIBLIOGRAPHY

- Economic Council of Canada (1979) One in Three: Pensions for Canadians to 2030 (Ottawa: Economic Council of Canada)
- Financial Executives Institute Canada (1980) Report on Survey of Pension Plans in Canada (Toronto)
- Inman, Robert (Dec. 1980) 'Public pensions, public unions and the local labour market.' Summer Institute Paper No. 80-9 (New York: National Bureau of Economic Research)
- Pesando, James E. (1981) 'Employee valuation of pension claims and the impact of indexing initiatives.' Mimeo, University of Toronto
- Pesando, James E. and Samuel A. Rea, jr (1977) Public and Private Pensions in Canada: an economic analysis (Toronto: University of Toronto Press for the Ontario Economic Council)
- Rea, Samuel A., jr (1981) 'Redistributive effects of Canada's public pension programs' (Ottawa: Economic Council of Canada)
- Royal Commission on the Status of Pensions in Ontario (1981a) Report (Toronto: Government of Ontario)
- (1981b) Summary Report (Toronto: Government of Ontario)
- Smith, Robert S. (1980) 'Pensions, underfunding and salaries in the public sector.' Conference paper. (Cambridge, Mass.: National Bureau of Economic Research, Nov.)
- Task Force on Retirement Income Policy (1980) The Retirement Income System in Canada: Problems and Alternative Policies for Reform (Ottawa: Government of Canada)
- Weitz, H. (1981) 'Contributors and contributions to registered retirement savings plans in Ontario.' Vol. 8 of Royal Commission on the Status of Pensions in Ontario (1981a)

Ontario Economic Council Discussion Papers

An Economic Analysis of the Hall Commission Report

A. Abouchar

Emerging Problems in Post-Secondary Education

The Northern Dilemma: Public Policy and Post-Secondary Education in Northern Ontario

D. M. Cameron

The Pension Fund Debate

R. M. MacIntosh and J. F. Chalcraft

Issues in Intergovernmental Relations

Reforming Planning in Ontario: Strengthening the Municipal Role

J. Bossons

Public Policy and Future Population in Ontario

D. K. Foot

The Elimination of Mandatory Retirement: An Economic Perspective

J. E. Pesando

Current Issues in Political Economy

Arthur M. Okun and Robert Solomon

Class Actions as a Regulatory Instrument

D. N. Dewees, J. R. S. Prichard and
M. J. Trebilcock

Nuclear Power at Ontario Hydro: A Case Study in Technological Innovation

F. Tapon and T. J. Osborne

Ten Markets or One?

Regional Barriers to Economic Activity in Canada

A. E. Safarian

Unemployment among Young People and Government Policy in Ontario

Morley Gunderson

Unemployment Insurance and Work Effort: Issues, Evidence, and Policy Directions

Derek P. J. Hum

Housing Policy for the 1980s

G. B. Fallis

Municipal Fiscal Reform in Ontario: Property Taxes and Provincial Grants

John Bossoms, Michael Denny, and
Enid Slack

Permanent Layoffs: Some Issues in the Policy Debate

Ronald S. Saunders

Commentaries on the Haley Report on Pensions

Louis Aschah, Robert Baldwin and
James Pesando

Copies of these publications are available at a nominal charge from the Ontario Government Bookstore, 880 Bay Street, Toronto to those shopping in person. Out-of-town customers may write: Publications Section, Fifth Floor, 880 Bay Street, Toronto, Ontario, M7A 1N8, or telephone 965-6015 (toll-free long distance, 1-800-268-7540; in northwestern Ontario, O-Zenith 67200).